BMJ Paediatrics Open

BMJ Paediatrics Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Paediatrics Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or payper-view fees (http://bmjpaedsopen.bmj.com).

If you have any questions on BMJ Paediatrics Open's open peer review process please email info.bmjpo@bmj.com

BMJ Paediatrics Open

A National BPSU/CAPSS Ascertainment Survey of Community Paediatricians and their experience of joint working with Mental Health professionals

Journal:	BMJ Paediatrics Open
Manuscript ID	bmjpo-2020-000713
Article Type:	Original research
Date Submitted by the Author:	14-May-2020
Complete List of Authors:	Ayyash, Hani; Southend University Hospital NHS Foundation Trust, Paediatrics; RCPCH, British Paediatric Surveillance Unit Ogundele, Michael; County Durham and Darlington NHS Foundation Trust, Child Health Schumm, Tanja-Sabine; NHS Greater Glasgow and Clyde, Child and Adolescent Psychiatry Mitrofan, Oana; University of Exeter, Medical School and Health Education South West (Peninsula) Lynn, Richard; University College London Research Department of Epidemiology and Public Health, Institue Of Child Health; Royal College of Paedaitrics, BPSU
Keywords:	Child Psychiatry, Epidemiology, Health services research, Qualitative research

SCHOLARONE™ Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our licence.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which Creative Commons licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

TITLES:

A National BPSU/CAPSS Ascertainment Survey of Community Paediatricians and their experience of joint working with Mental Health professionals

AUTHORS:

Hani F Ayyash^{1,5,6}, Michael Ogundele², Tanja-Sabine Schumm³, Oana Mitrofan⁴, Richard M Lynn^{5,6}

AFFILIATIONS:

- 1. Mid and South Essex University Hospitals Group, Southend University Teaching Hospital UK
- 2. Halton Community Pediatrics Unit, Bridgewater Community Healthcare NHS Foundation Trust, Runcorn UK
- 3. Child and Adolescent Psychiatry, NHS Greater Glasgow and Clyde, UK
- 4. University of Exeter Medical School and Health Education South West (Peninsula), UK
- 5. British Paediatric Surveillance Unit, Royal College of Paediatrics and Child Health, UK
- 6. Child and Adolescent Psychiatric Surveillance System, Royal College of Psychiatry, UK

Corresponding Author:

Dr Hani F Ayyash Southend University Hospital NHS Foundation Trust, Paediatrics Department, Westcliff-on-Sea, Essex, UK

Email: Hani.Ayyash@southend.nhs.uk

Contributorship Statement:

HF and JSS designed the survey, MO analysed the data and prepared the initial manuscript draft, OM performed the thematic analysis of qualitative data, RML revised and adapted the script for publication.

Abstract

Background

Child / Adolescent Mental Health Services (CAMHS) psychiatrists and other professionals are specialists in managing children and young people (CYP) with emotional, behavioural or mental health (MH) difficulties. Increasingly Community Child Health (CCH) clinicians are also managing a range of neurodevelopmental, behavioural and emotional problems. The overlapping roles of CCH and CAMHS mean that both need to be included for effective surveillance and research of behavioural/emotional problems among CYP.

Method

An online survey was conducted to gain a better understanding of the extent to which CCH paediatricians might be seeing children with rare mental health conditions that could be missed in a Child and Adolescent Psychiatrist Surveillance System (CAPSS) study directed solely to CAMHS psychiatrists. In addition to specific questions about their roles and caseload, the respondents we able to give free comments about their experiences of collaborative work with CAMHS, which was subjected to thematic analysis.

Results

A total of 245 respondents working within 180 CCH units across the UK completed the questionnaire. Common themes identified from the paediatricians' responses included high rate of CCH referrals from primary healthcare/other agencies as default, patients' experience of service fragmentation between CCH and CAMHS, limited CAMHS access or availability, high rejection rate for CAMHS referrals, as well as some positive examples of integrated/collaborative work.

Conclusion

Responses highlight the wide range of work CCH paediatricians are expected to undertake in the field of CYP mental health. The need for CCH in rare disease surveillance and the challenges of joint-working with CAMHS were highlighted.

Keywords:

Neurodevelopmental and emotional problems, childhood, Child / Adolescent Mental Health Services, Integrated care, surveillance, child health

Abbreviations;

ADHD: Attention Deficit Hyperactivity Disorder; ASD: Autism Spectrum Disorder; BPSU: The British Paediatric Surveillance Unit; CAPSS: Child Adolescent Psychiatry Surveillance System; CAMHS: Child and Adolescent Mental Health Services; CCH: Community Child Health; DCD: Developmental Coordination Disorder; FAS: Foetal Alcohol Syndrome; FASD: Foetal Alcohol Spectrum Disorder; NDEP: Neurodevelopmental and Emotional problems; LAC: Looked-After Children; LD: Learning Disorders; MDT: Multidisciplinary teams; MH: Mental Health; SEND: Special Educational Needs and Disability;

Word Count: Abstract 250; Script: 2410

INTRODUCTION

Community Child Health (CCH) is the branch of paediatrics specialising in management of neurodevelopmental and emotional problems (NDEP), including Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Tics disorder (TD)/ Tourette's syndrome (TS), Learning Disorders (LD), Developmental delay, Development coordination disorder (DCD) as well as child safeguarding and looked after children (LAC).¹ Co-existence of disorders and sharing of symptoms across disorders (co-morbidity) is the rule rather than the exception for most children presenting with impairments in various domains of development, communication and language, social interrelatedness, motor coordination, attention, behaviour, mood and sleep².

Child / Adolescent Mental Health Services (CAMHS) psychiatrists and other professionals are specialists in managing children and young people (CYP) with emotional, behavioural or mental health (MH) difficulties. The roles of CAMHS and CCH professionals are similar and overlap in the management of common co-occurring MH problems associated with several NDEPs.

Growing evidence reveals that children with NDEP and intellectual disorders have three to four-fold increase in prevalence of co-occurring mental disorders into adulthood³⁻⁶. There are usually no consistent service provisions to address most of these co-morbidities in a holistic manner and access to effective treatments for MH problems among CYP is variable across the UK⁷.

Extant literature provide ample basis for joint-working between CCH and CAMHS as optimal settings for providing effective and seamless high quality care to most CYP presenting with various MH and NDEPs. Some conditions such as TS and LD are inter-changeably managed by either of the services in different locations across the UK¹. Other healthcare professionals including therapists and educational specialists are also often involved in the management of the childhood MH/NDEPs.^{8,9}

Despite recent government policies emphasizing more integration of multidisciplinary agencies working with CYP with MH problems¹⁰⁻¹², there is nationwide variation in clinical practice and evidence-based research in this area is limited.

The importance of including other professionals in the monitoring of behavioural and MH conditions surveyed by the Child Adolescent Psychiatry Surveillance System (CAPSS) is clear. Those studies that have involved the British Paediatric Surveillance Unit (BPSU) which include CCH clinicians have shown the need to include the paediatricians in the CAPSS surveys. To maximize case ascertainment, it is important to understand the extent of management inter changeability and the new commitments of CCH clinicians in the field of rare paediatric MH disorders.¹³

DESIGN AND METHODS

An online survey, reviewed and approved by the BPSU and CAPSS, was conducted to identify whether CCH paediatricians could support the ascertainment of rare mental health conditions through the CAPSS which currently is directed solely to the CAMHS psychiatrists (CAPs). The survey was distributed through the British Association of Community Child Health (BACCH) newsletters and direct mass-emailing to members via a link to the web-based tool Survey Monkey. Responses were obtained between December 2015 and August 2016.

Respondents were also asked about their special roles or interest in the care provision for CYP with various NDEPs. The respondents were also invited to give free comments, which were analysed with the aim of identifying common themes regarding respondents' experiences of collaborative work with CAMHS through thematic analysis¹⁴.

Patient and Public Involvement

This survey was carried out among clinicians and no direct patient data was required. The survey was designed by members of the CAPSS (Child and Adolescent Psychiatric surveillance Unit of the RCPsych) executive team and discussed with the committee members of BPSU (British Psychiatric Surveillance Unit of the RCPCH). Each of the teams have a permanent PPI Representative sitting on the Executive board. They both advised that patient public involvement approval was not needed.

RESULTS

Characteristics of respondents

A total of 245 respondents working within 180 CCH units across the UK completed the questionnaire. These included professionals working at different grade levels including consultants (75%), specialist associates/staff grades (20%) and others including trainees (5%).

Age range and specialty interests

Two hundred and thirty-seven (97%) respondents worked with CYP aged 0-18 years. Twenty-seven respondents (11%) reported working with young people (YP) aged 19-25 years. These YP often had their transition to adult services delayed (20/27), lacked any suitable adult services (10/27), had complex disabilities or attended special education (9/27). The paediatrician acting in capacity of the Disability Medical Officer was another common reason for managing the older YP (4/27).

Table 1 shows the different areas of CCH involvement, predominantly neurodevelopment (65%), neurodisability (46%) and safeguarding/child protection (40%). Many respondents reported their services as being most deficient in assessment and management of CYP with Foetal Alcohol Spectrum Disorder, attachment and adverse childhood experiences.

Local service configuration for assessment/treatment of different conditions

Participants' responses on whether CAMHS were part of a multi-disciplinary team or joint service provision in their area were almost evenly split, with a slight preponderance of no joint input (51% vs. 43%).

The two conditions with the highest reported joint CCH/CAMHS management were ASD (21%) and ADHD (11%), followed by eating/feeding disorders (8%) and physical symptoms with psychological causes (8%)(Table 2). This confirms that CCH paediatricians are also involved in management of rare MH disorders.

Thematic analysis identified the following recurring issues

Experiences of Joint Paediatric/CAMH service

One hundred and seventeen (48%) of the respondents described their experience of variable degree of local CAMHS integration / joint working with CCH services (Table 3). Common themes identified from the paediatricians' responses included patients' experience of service fragmentation between CCH and CAMHS, limited CAMHS access or availability, high rejection rate for referral to CAMHS, and high rate of CCH referrals from primary healthcare/other agencies who identify the CCH

as the only available option. Some positive patterns of integrated/ collaborative working were also highlighted by a minority of respondents (Table 4).

Some respondents gave examples of great challenges encountered with trying to maintain previous or ongoing multidisciplinary team (MDT)/joint work in the face of financial constraints. Some clinicians have witnessed discontinuation/ service closure in some areas. Obstacles encountered with CAMHS joint-working were staff movement, 'cuts' in staff and resources, and teams/disciplines belonging to different organisations.

Identified gaps in service provision

The limited or lack of services for particular problems/conditions such as associated MH problems in CYP with ASD, ADHD and Foetal Alcohol Syndrome, childhood trauma (abuse, neglect) and attachment difficulties, anxiety, feeding problems, and issues around transition to adult services was commented on by 41/117(35%) (Box 1).

Disjointed services / Disjointed (Fragmented) Care

Participants often commented on the limited or lack of joint work between paediatric and CAMH services despite acknowledged need for more streamlined provision of integrated services. Many respondents noted that services were frequently working in a 'fragmented' or parallel pattern. Common reasons mentioned for limited CAMHS access were lack of resources, including 'cuts' in staff, narrow/high referral/acceptance threshold and 'massive' waiting lists.

Some respondents commented on compartmentalised services that are commissioned based on diagnosis and age grouping rather that the presenting problems such as challenging behaviours, with patients often require holistic/multidisciplinary assessment/intervention. CAMHS or CCH services are often based in different Trusts, with CAMHS linked to adult mental health services rather than children's services. The consequences of disjointed service provision often led to CYP bounced between services, long delays and patients 'falling through the gaps'. CCH Paediatrics would often act as 'safety net' for such CYP, although neither equipped nor commissioned for the interventions required (Box 1).

CCH services overwhelmed by referrals

30/117 (26%) respondents reported ever increasing CCH workload because it is commonly regarded as the "default gateway" for CYP with any MH or behavioural problems for which no other suitable services exist. It was stated that many referrers would often provide little or no other justification for requesting the CCH service than stating that "family/school would like them assessed for ADHD/ASD" or for "behaviour problems". It was also felt that many CYP normally referred to CAMHS are initially referred to the CCH services either because of the long waiting list or inappropriate rejection by CAMHS for "not reaching their threshold".

Some respondents identified their lack of "expertise" for appropriate assessment and management of many CYP with complex MH issues referred to them, such as FAS/FASD and Attachment disorders (Box 1).

Future integration desirable

A small number of participants (n=23; 20%) noted ongoing plans for future collaboration/integrated service in their local areas but not yet functional. Examples of suggestions for service improvement by the respondents included increased joint working/service integration and enhanced (adult and child)

MH training among paediatricians. 9/23 (39%) respondents also emphasized the need for more resources allocated to both CCH and CAMHS and the desirability of enhanced training among primary care professionals.

Good examples of effective Joint work

Well established CCH - CAMHS joint working/ integration in their area was described by 18 respondents. Common areas of collaboration cited include multidisciplinary teams (MDT) for ADHD, LD and Special Educational Needs (Box 1).

Variation in service provision

Concerns about great geographical variation in service provision and the subsequent "postcode lottery" effect was mentioned by 15 respondents. It was noted that several services are configured around different ages (5/8/10/11 years) as cut-offs between CCH and CAMHS in different areas. Other services are restricted to managing specific conditions/diagnosis e.g specialist ASD and ADHD services, with wide variation in the type of professionals/clinicians involved (Box 1).

DISCUSSION

The commonest areas of CCH services engaged in by CCH paediatricians are ADHD and ASD, Neurodisability and Safeguarding/Child Protection. This seems to correlate with findings of the most recent RCPCH/BACCH national survey of CCH services which showed that 99% (85/86) of CCH services provide an ASD assessment clinic, 63% had ADHD clinics and 57-82% provided safeguarding /Child protection services¹.

The model of joint services between CCH and CAMHS team was most frequently reported for ASD and ADHD. The respective NICE guidelines clearly emphasized the importance of multidisciplinary professionals working across several statutory and voluntary agencies in the optimal assessment and management of these neurobehavioural disorders, identifying their coexisting physical health conditions and MH problems^{8,9}.

BACCH/RCPCH in their recent workforce guide identified that "some of the CCH functions, particularly around 'behaviour problems' are split between paediatricians and CAMHS or other specialist teams but by default many families, general practitioners (GPs) and social and education professionals refer to the CCH team when they have concerns". These findings are corroborated by this study. This suggests an indispensable need for close collaboration between CCH and CAMHS teams to ensure optimal care to most of the children referred to the CCH services.

The findings suggest that surveillance restricted to CAPs could miss children with some mental health conditions. Some children with conditions of interest to CAPSS may be seen in significant numbers in CCH services, some of which could struggle to bring their patients to the attention of a CAP.¹⁵

There are many historical and financial explanations for the poor integrated collaboration between services designed for CYP with NDEPs. "Changes to the structure of the NHS in England have left pathways of care fragmented with teams managed by different organisations with different ways of working and a range of outcome and performance monitoring requirements". The responses of many CCH paediatricians identified some recurring themes including: gaps in service provision, disjointed

services, variation in care provision and obstacles to joint working. There were however positive examples of effective collaborative work between CCH and CAMHS.

Advantages of inter-disciplinary cooperation among multi-professional teams have been well documented in several paediatric conditions. Availability of integrated CCH and CAMH specialists will reduce anxiety and confusion for the family of CYP. Children and families do often find transitions between different teams and/or agencies stressful ¹⁶. A recently published meta-analysis of trials of integrated medical and behavioural care demonstrated improved outcomes ¹⁷. An integrated multi-professional service would provide a clearer referral route with a single point of access for patients and their families, and a consistent assessment process across diagnosis boundaries ^{13,15}.

Drawing on the findings from a 3-year qualitative research study, Abbott et al concluded that whilst professionals felt that they were able to offer families a more efficient service, there was concern that the overall impact of multi-agency working on disabled children and their families would be limited. The structures of multi-agency teams/services have potentials for improved information sharing and problem solving, while cutting down a huge amount of duplication.¹⁸

Some examples of best practices highlighted in the survey included provision of community-based psychology services to CYP aged between 0 and 18 years. Joint working and collaboration with other agencies were also identified, including multidisciplinary discussions with the social care services, CAMHS and Paediatrics for CYP under the care of early years services, on Child in Need or Child Protection plans and those under the care of the local authority (CYP in care).

Some examples of functional joint-working with CAMHS could include monthly joint case reviews, agreed referral pathways and joint triage procedures. Even in the absence of full-fledged integrated arrangements between CAMH and CCH services, minimum MH input into the management of various neurodevelopmental disorders and their MH co-morbidities could be clinical psychology service for provision of parenting support, which will help to improve the wellbeing of children and families coping with life's challenges, and prevent future significant MH disorders¹⁹.

Improved joint training between both CAMHS and CCH about common overlapping conditions would help professionals to function more effectively in recognising and hence notifying CAPSS about rare co-morbid MH problems among CYP with a wide range of NDEPs¹³.

Strengths and limitations of the study

One of the strengths of this study is its nationwide scope and presentation of a representative sample of CCH paediatricians' workload and experience of working with CAMHS practitioners in the UK. There are however potential weaknesses of the study that require caution when interpreting the results.

The qualitative analysis of the free comments provided by participants to the national survey has not been followed by any focus group or interview, therefore no opportunity for further in-depth exploration of emerging themes was done. There's a possibility that the participants' perspectives are potentially skewed towards negative experiences as clinicians with negative experiences would be more likely to respond. However, many of the important responses have been previously reported by other national surveys, including the most recent BACCH/RCPCH workforce survey ¹.

As with any large cross-sectional study, there is potential error of incomplete data set. We however believe that the national scope of respondents is fairly representative of the current picture of clinical practice in the UK.

The survey's strength lies in its national respondent base, providing a panoramic view across diverse geographical and socioeconomic settings. The findings however need to be interpreted with caution, in view of the potential limitations described above.

Conclusion

Most of the community paediatricians highlighted the challenges of service provision for young people above 16 years and the desirability of joint-working with CAMHS. Further nation-wide survey would help better understanding of the mental health needs of CYP and improvement of workforce, training and service planning for the future. In turn this would help in the swifter recognition of MH conditions especially rare presentations.

Acknowledgment:

The authors acknowledge with gratitude the invaluable support of the CAPSS, BPSU, BACCH officials and all the paediatricians who took part in the survey. We are also highly indebted to Dr Michael Morton, consultant child and adolescent psychiatrist and CAPSS Executive Member, who was very instrumental in setting up the study. We also acknowledge the support and encouragement of Dr Simon Lenton, co-chair of BACAPH and Scientific member of BPSU, who kindly reviewed the script and gave constructive recommendations.

"What is already known on this topic"

- Children and young people (CYP) with neurodevelopmental, behavioural and intellectual disorders (NDBEID) have three to four-fold increase in prevalence of co-occurring mental MH disorders
- There is evidence to support need of joint working and reporting between CCH and CAMHS for optimal care of CYP with various NDBEID
- There is need for improved ascertainment for rare disease surveillance among CCH paediatricians and CAP

"What this study adds"

- CCH paediatricians are an important asset in maximising case ascertainment of rare mental health conditions in CYP
- CCH paediatricians are being expected to carry much of the workload previously undertaken by CAMHS.
- Though there were some negative experiences, CCH paediatricians overwhelmingly reported their experience of working with CAMHS as positive despite both services being heavily stretched.

References

- BACCH/RCPCH. Covering all bases Community Child Health: A paediatric workforce guide. RCPCH Sept 2017, London. Online https://www.rcpch.ac.uk/sites/default/files/2018-03/covering all bases community child health a paediatric workforce guide.pdf
- 2. Gillberg C. The ESSENCE in child psychiatry: early symptomatic syndromes eliciting neurodevelopmental clinical examinations. Res Dev Disabil 2010; 31:1543-1551. doi: 10.1016/j.ridd.2010.06.002
- 3. Lindert J. Mental disorders of children with neurodevelopmental disorders: European Journal of Public Health. 2013; 23(suppl 1):101-2. doi: 10.1093/eurpub/ckt126.250
- 4. Betts KS, Williams GM, Najman JM, Alati R. Predicting spectrums of adult mania, psychosis and depression by prospectively ascertained childhood neurodevelopment. J Psychiatr Res. 2016;72:22-9. doi: 10.1016/j.jpsychires.2015.10.013. [Epub 2015 Oct 19].
- 5. Belardinelli C, Raza M, Taneli T. Comorbid Behavioral Problems and Psychiatric Disorders in Autism Spectrum Disorders. Journal of Childhood & Developmental Disorder 2. 2016; 2(2:11): 1-9. doi: 10.4172/2472-1786.100019 [Epub March 11, 2016].
- 6. Romero M, Aguilar JM, Del-Rey-Mejías Á et al. Psychiatric comorbidities in autism spectrum disorder: A comparative study between DSM-IV-TR and DSM-5 diagnosis. International Journal of Clinical and Health Psychology. 16(3), 2016: 266–275. doi: 10.1016/j.ijchp.2016.03.001. [Epub 2016 Jun 3].
- 7. Coventry PA, Hays R, Dickens C et al. 'Talking about depression: a qualitative study of barriers to managing depression in people with long term conditions in primary care'. BioMed Central Family Practice. 2011;12(10): 1-11. doi: 10.1186/1471-2296-12-10 Available at: http://bmcfampract.biomedcentral.com/articles/10.1186/1471-2296-12-10 (Last accessed Sept 2019).
- 8. National Institute for Clinical and Health Excellence (NICE) UK. Attention deficit hyperactivity disorder: diagnosis and management. NICE guideline [NG87]. March 2018. Online: https://www.nice.org.uk/guidance/ng87/resources/attention-deficit-hyperactivity-disorder-diagnosis-and-management-pdf-1837699732933)
- 9. National Institute for Health and Care Excellence (NICE). Autism spectrum disorder in under 19s: recognition, referral and diagnosis [CG128] Dec 2017. (Online: https://www.nice.org.uk/guidance/cg128/resources/autism-spectrum-disorder-in-under-19s-recognition-referral-and-diagnosis-pdf-35109456621253)
- Naylor C, Das P, Ross S et al. Bringing together physical and mental health A new frontier for integrated care. The Kings Fundon, London. March 2016. (Online: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Bringing-together-Kings-Fund-March-2016_1.pdf)
- 11. NHS England (NHSE). Five year forward view. 2014. (Online: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf)
- 12. NHS England (NHSE). Child and Adolescent Mental Health Services (CAMHS) Tier 4 Report CAMHS National Review. 2014b. Available online: https://www.england.nhs.uk/wp-content/uploads/2014/07/camhs-tier-4-rep.pdf
- 13. The Child and Adolescent Psychiatry Surveillance System (CAPSS). The Seven Year Report: 2016. Dec 2016. (Online: https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/ccqi-research-and-evaluation/capss/publications/capss-7-year-report-12-16-ii.pdf?sfvrsn=2c3ac09b 2)
- 14. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006; 3: 77–101.

- 15. Eke H, Ford T, Newlove-Delgado T, Price A, Young S, Ani C, Sayal K, Lynn RM, Paul M, Janssens A. Transition between child and adult services for young people with attention-deficit hyperactivity disorder (ADHD): findings from a British national surveillance study. Br J Psychiatry. 2019 Jun 4:1-7. doi: 10.1192/bjp.2019.131. [Epub 2019 Jun 4]
- 16. Department of Health. Closing the Gap: Priorities for essential change in mental health. London 2014. (Online:
 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/281250/Closing _the_gap_V2_-_17_Feb_2014.pdf)
- 17. Asarnow JR, Rozenman M, Wiblin J et al. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. JAMA Pediatr 2015;169:929–37
- 18. Abbott D, Townsley R, Watson D. Multi-agency working in services for disabled children: what impact does it have on professionals? Health and Social Care in the Community 2005; 13(2), 155–163.
- 19. Children's Commissioner: Briefing: Children's Mental Healthcare in England. Oct 2017. (Online: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/10/Childrens-Commissioner-for-England-Mental-Health-Briefing-1.1.pdf)

Tables and Figures

Table 1 showing the special roles or interests of the respondents

Areas of involvement	Percent (%) N=245	No.
	IN-245	Respondents
Neurodevelopmental (including ADHD and ASD)	65%	160
Neurodisability – Epilepsy, sleep, sensory	47%	114
Safeguarding/Child Protection	40%	97
Behavioural Paediatrics - depression	30%	74
Looked-After Children	28%	68
Fetal Alcohol Syndrome/FASD	16%	40
Others (e.g., genetics, research, continence, SEND,	21%	52
Palliative)		

Legend:

ADHD - Attention Deficit Hyperactivity Disorder; ASD - Autism Spectrum Disorder; FASD -Foetal Alcohol Spectrum Disorder; SEND - Special Educational Needs and Disability

Table 2 Local configuration of service for assessment/treatment of different conditions

Specific conditions ^{&}	Joint service (with CCH and CAMH staff)	CCH alone	CAMHS alone	Other services with no paediatrician or CAP
ASD	21%	93%	47%	8%
ADHD	11%	68%	61%	3%
Eating/Feeding Disorders	8%	56%	74%	6%
Physical Symptoms with Psychological Causes	8%	64%	52%	4%
Learning Disability	6%	92%	37%	6%
Attachment Disorder	4%	37%	63%	8%
Psychological Effects of Trauma/Neglect	4%	30%	66%	13%
Emotional Disorders (Anxiety/OCD)	2%	30%	87%	8%
Tourette's syndrome	1%	63%	66%	3%
Self-Harm/Suicidality	1%	15%	98%	4%
Depression	1%	13%	99%	4%
Psychosis and Bipolar Disorder	1%	2%	98%	1%
FAS	0.4%	90%	14%	4%

Eroportion of respondents describing the different service configurations
ADHD - Attention Deficit Hyperactivity Disorder; ASD - Autism Spectrum Disorder; FASD- Foetal Alcohol Spectrum Disorder; CCH – Community Child health; CAP - Child and Adolescent Psychiatrist; CAMH - Child and Adolescent Mental health; FAS - Fetal Alcohol Syndrome; OCD – Obsessional Compulsive disorder

Table 3 showing the various degree of CAMHS - CCH integration / joint working

Type of collaboration	No of	
	comments	
Regular joint CAMHS working	12	
Dx-specific-ASD, complex ADHD, LD	34	
Ad-hoc joint clinic, or informal	13	
Discussion		
Psychologist	7	
Discontinued joint-working	7	
Planned for the future	2	

Dx –Disease/disorder; ADHD - Attention Deficit Hyperactivity Disorder; ASD - Autism Spectrum Disorder; LD - Learning Disorders; CAMHS - Child and Adolescent Mental Health Services

Table 4 Emerging themes of paediatricians' experience of joint working with CAMHS

Theme	Summary	No of comments N = 117 (%)
Gaps in service provision	Large unmet needs, Common problems that do not meet CAMHS referral threshold, non-existent services for some conditions, failure of transition to adult serviced	41 (35%)
Disjointed services and disjointed care	Patient and family frustruation, discontinuity of care, and uncertainties, duplication of efforts	36 (31%)
CCH services often overwhelmed by referrals	Professionals forced to offer services outside their competencies with no proper training, poor quality services, and risk of harm to patients	30 (26%)
Future integration desirable	Examples of planned processes for greater integration of services	23 (20%)
Good examples of effective Joint work	Some examples of good practice with integrated services	18 (15%)
Variation in service provision	Clinical discrimination, inequality, postcode lottery	15 (13%)
egend: Total Respondents = 117		

Box 1 showing some examples of responses for the emerging themes of CCH Paediatricians' experience of joint working with CAMHS

Theme	Examples of responses
Gaps in service provision	 'CAMHS do not deal with anxiety related to ASD. They expect paediatricians to deal with this.' 'No service for management of challenging behaviour, anxiety and mood disorder observed as part of ADHD/Autism.' 'We also have difficulties accessing therapeutic support for children with neurodevelopmental conditions e.g. ASD with anxiety as it is labelled as "part of the expected with this condition" therefore does not reach the threshold for CAMHS.' 'Very limited support for attachment/trauma, except for looked after children. Many children on community paediatric caseload (e.g. with ADHD and likely trauma) have these issues, very difficult to access support.' 'Anxiety and OCD seem to fall between gaps in services and actually may be referred to voluntary organisations but services do not appear robust. Locally, lots of the above are referred to community paediatrics because services that used to see children (e.g. clinical psychology) with anxiety or feeding issues no longer see these cases unless there is an underlying mental health issue.' 'Transition is a challenge. A lot of services end at 18th birthday or we have to transition to GP but the YP with neurodisability often in special school (where I do clinics) until past 20 – so difficult to know when to discharge.'
Disjointed services and disjointed care	 'There is poor joint working with CAMHS services here. They reject increasing numbers of referrals which are then sent on to us, whether or not we have the expertise required.' 'There is often involvement from both services but not a joint service, children are seen separately.' 'I feel that many of our patients would benefit from both community paediatrics and CAMHS involvement but joint working does not happen regularly.' 'Most patients are automatically referred to the community paediatric services because CAMHS will almost invariably reject all referrals and the primary care has no other place to refer children with complex medical needs other than the community paediatrics.' 'Patients are constantly bounced between CAMHs and community paediatrics. It is almost impossible to get any intervention from CAMHS for children who are already seeing a community paediatrician (as a consultant community paediatrician we are unable to get a consultant psychiatry review in complex cases).' 'As paediatricians we try to work within the areas of our expertise/training but are under constant pressure to see children who should be being seen in CAMHS but who are repeatedly turned down as not meeting their criteria -

of effective

CCH services often overwhelmed by referrals	 which seems to be limited to severe mental illness. This is what happens when CAMHS service is part of an adult mental illness service rather than integrated with children's services.' 'Many of the CAMHS services have been given to school nurses, untrained staff who are unable to give families formulations or explanations for the child's behaviours which leads to dissatisfaction. The Community Paediatric team is holding responsibility for a large number of children who actually require psychological or psychiatric input which is not provided locally.' lots of the above are referred to community paediatrics because services that used to see children (e.g. clinical psychology) with anxiety or feeding issues no longer see these cases unless there is an underlying mental health issue. Children often present with 'behaviour problems' to the community paediatrician where it is not obvious from the referral information what the underlying cause may be Community Paediatrics sees many children with anxiety who do not reach CAMH threshold. Sometimes when the issues are psychological other agencies will find the wait time to see CAMHS unacceptable and then modify their referral to include, for example, autism and ask community paediatrics to see. It is very frustrating because then the problems are sent to the paediatric team, we have neither the skills nor the resources to deal with many of the problems, nor are we commissioned to do so Children don't usually present with a diagnosis! They present with a behaviour. CAMHS usually doesn't accept referrals of preschool children until they have seen a paediatrician There is a huge number of children who end up being supported/managed for their emotional/mental health difficulties by paediatrics long term as tier 2 CAMHS only provide low level and short term work (6 - 8 weeks).
Future integration desirable Good examples	 'There is a huge unmet need to facilitate joint working between CAMHS and community paediatrics. Routine care for neurodevelopmentally different children should belong to community paediatric teams supported as needed by CAMHS whilst children with the more severe depressive or psychotic disorders should be rapidly supported by senior members of the CAMHS team and CAMHS should be more easily accessible for children with difficult to manage emotional problems.' 'Need for more joined up service as it is very fragmented and does not meet needs of the family and child.' 'I strongly feel that joint work between Child Psychiatrist and Paediatricians is required.' 'We need national recognition that CAMHS does include children and to redefine mental health which has become an excuse to not see anyone unless they've already suicided, or on deaths door with anorexia.' 'ADHD multidisciplinary team with clinical nurse specialists and clinical
of officering	- April mandiasciplinary team with clinical nurse specialists and clinical

psychologist'

'ADHD nurse (CAMHS) does joint clinic with paeds (in assessment pathway)'
 'This is both a formal (with LD/MH team) and informal arrangement (for neurodevelopmental disorders) established to develop better working together of teams and to avoid duplication of service' 'Joint clinic with CAMHS worker at SEND special school' 'There is almost no joint working between us except in the LD CAMHS service.'
 'ASD under 5 is assessed by psychologists from child disability team, which does not include either paediatrics or CAMHS Physical symptoms with psychological causes will be seen by paediatricians and health psychologist who sits within paediatric team. Eating disorders (anorexia nervosa etc.) will be seen by CAMHS. They may also be seen by paediatrics, but not as part of a joint team. Feeding problems will be seen by paediatrics.' 'ASD is split with under 10s seen by paediatricians and over 10s by CAMHS' 'Under 5s with suspected ASD are assessed in Paediatrics. Over 5s with suspected ASD are assessed by CAMHS, but may be seen in Paediatric first.' 'I cover two hospitals which have different CCGs so services differ slightly depending which hospital catchment area they live in.' 'Currently our services are fragmented. There is no service for ADHD for 6 - 8 year olds; 8 - 11 ADHD and ASD are being diagnosed by a private provider and there is lack of clarity about ongoing follow up. ADHD and ASD in over 11s are seen by CAMHs. There is no mental health input for primary school aged children unless they are presenting with critical issues.'
rs = 117

BMJ Paediatrics Open

A National BPSU/CAPSS Ascertainment Survey of Community Paediatricians and their experience of joint working with Mental Health professionals in the UK

Journal:	BMJ Paediatrics Open
Manuscript ID	bmjpo-2020-000713.R1
Article Type:	Original research
Date Submitted by the Author:	23-May-2020
Complete List of Authors:	Ayyash, Hani; Southend University Hospital NHS Foundation Trust, Paediatrics; RCPCH, British Paediatric Surveillance Unit Ogundele, Michael; County Durham and Darlington NHS Foundation Trust, Child Health Schumm, Tanja-Sabine; NHS Greater Glasgow and Clyde, Child and Adolescent Psychiatry Mitrofan, Oana; University of Exeter, Medical School and Health Education South West (Peninsula) Lynn, Richard; University College London Research Department of Epidemiology and Public Health, Institue Of Child Health; Royal College of Paedaitrics, BPSU
Keywords:	Child Psychiatry, Epidemiology, Health services research, Qualitative research

SCHOLARONE™ Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our licence.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which Creative Commons licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

TITLES:

A National BPSU/CAPSS Ascertainment Survey of Community Paediatricians and their experience of joint working with Mental Health professionals in the UK

AUTHORS:

Hani F Ayyash^{1,5,6}, Michael Ogundele², Tanja-Sabine Schumm³, Oana Mitrofan⁴, Richard M Lynn^{5,6}

AFFILIATIONS:

- 1. Mid and South Essex University Hospitals Group, Southend University Teaching Hospital UK
- 2. Halton Community Pediatrics Unit, Bridgewater Community Healthcare NHS Foundation Trust, Runcorn UK
- 3. Child and Adolescent Psychiatry, NHS Greater Glasgow and Clyde, UK
- 4. University of Exeter Medical School and Health Education South West (Peninsula), UK
- 5. British Paediatric Surveillance Unit, Royal College of Paediatrics and Child Health, UK
- 6. Child and Adolescent Psychiatric Surveillance System, Royal College of Psychiatry, UK

Corresponding Author:

Dr Hani F Ayyash Southend University Hospital NHS Foundation Trust, Paediatrics Department, Westcliff-on-Sea, Essex, UK

Email: Hani.Ayyash@southend.nhs.uk

Contributorship Statement:

HF and JSS designed the survey, MO analysed the data and prepared the initial manuscript draft, OM performed the thematic analysis of qualitative data, RML revised and adapted the script for publication.

Abstract

Background

Child / Adolescent Mental Health Services (CAMHS) psychiatrists and other professionals are specialists in managing children and young people (CYP) with emotional, behavioural or mental health (MH) difficulties. Increasingly Community Child Health (CCH) clinicians are also managing a range of neurodevelopmental, behavioural and emotional problems. The overlapping roles of CCH and CAMHS in the UK mean that both need to be included for effective surveillance and research of behavioural/emotional problems among CYP.

Method

An online survey was conducted to gain a better understanding of the extent to which CCH paediatricians might be seeing children with rare mental health conditions that could be missed in a Child and Adolescent Psychiatrist Surveillance System (CAPSS) study directed solely to CAMHS psychiatrists. In addition to specific questions about their roles and caseload, the respondents we able to give free comments about their experiences of collaborative work with CAMHS, which was subjected to thematic analysis.

Results

A total of 245 respondents working within 180 CCH units across the UK completed the questionnaire. Common themes identified from the paediatricians' responses included high rate of CCH referrals from primary healthcare/other agencies as default, patients' experience of service fragmentation between CCH and CAMHS, limited CAMHS access or availability, high rejection rate for CAMHS referrals, as well as some positive examples of integrated/collaborative work.

Conclusion

Responses highlight the wide range of work CCH paediatricians are expected to undertake in the field of CYP mental health. The need for CCH in rare disease surveillance and the challenges of joint-working with CAMHS were highlighted.

Keywords:

Neurodevelopmental and emotional problems, childhood, Child / Adolescent Mental Health Services, Integrated care, surveillance, child health

Abbreviations;

ADHD: Attention Deficit Hyperactivity Disorder; ASD: Autism Spectrum Disorder; BPSU: The British Paediatric Surveillance Unit; CAPSS: Child Adolescent Psychiatry Surveillance System; CAMHS: Child and Adolescent Mental Health Services; CCH: Community Child Health; DCD: Developmental Coordination Disorder; FAS: Foetal Alcohol Syndrome; FASD: Foetal Alcohol Spectrum Disorder; NDEP: Neurodevelopmental and Emotional problems; LAC: Looked-After Children; LD: Learning Disorders; MDT: Multidisciplinary teams; MH: Mental Health; SEND: Special Educational Needs and Disability;

Word Count: Abstract 250; Script: 2410

INTRODUCTION

Community Child Health (CCH) is the branch of paediatrics specialising in management of neurodevelopmental and emotional problems (NDEP), including Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Tics disorder (TD)/ Tourette's syndrome (TS), Learning Disorders (LD), Developmental delay, Development coordination disorder (DCD) as well as child safeguarding and looked after children (LAC).¹ Co-existence of disorders and sharing of symptoms across disorders (co-morbidity) is the rule rather than the exception for most children presenting with impairments in various domains of development, communication and language, social interrelatedness, motor coordination, attention, behaviour, mood and sleep².

Child / Adolescent Mental Health Services (CAMHS) psychiatrists and other professionals are specialists in managing children and young people (CYP) with emotional, behavioural or mental health (MH) difficulties. The roles of CAMHS and CCH professionals are similar and overlap in the management of common co-occurring MH problems associated with several NDEPs.

Growing evidence reveals that children with NDEP and intellectual disorders have three to four-fold increase in prevalence of co-occurring mental disorders into adulthood³⁻⁶. There are usually no consistent service provisions to address most of these co-morbidities in a holistic manner and access to effective treatments for MH problems among CYP is variable across the UK⁷.

Extant literature provide ample basis for joint-working between CCH and CAMHS as optimal settings for providing effective and seamless high quality care to most CYP presenting with various MH and NDEPs. In the UK, some conditions such as TS and LD are inter-changeably managed by either of the services in different locations across the UK¹. Other healthcare professionals including therapists and educational specialists are also often involved in the management of the childhood MH/NDEPs.^{8,9}

Despite recent government policies emphasizing more integration of multidisciplinary agencies working with CYP with MH problems¹⁰⁻¹², there is nationwide variation in clinical practice and evidence-based research in this area is limited.

The importance of including other professionals in the monitoring of behavioural and MH conditions surveyed by the Child Adolescent Psychiatry Surveillance System (CAPSS) is clear. Those studies that have involved the British Paediatric Surveillance Unit (BPSU) which include CCH clinicians have shown the need to include the paediatricians in the CAPSS surveys. To maximize case ascertainment, it is important to understand the extent of management inter changeability and the new commitments of CCH clinicians in the field of rare paediatric MH disorders.¹³

DESIGN AND METHODS

An online survey (see Appendix), reviewed and approved by the BPSU and CAPSS in the UK, was conducted to identify whether CCH paediatricians could support the ascertainment of rare mental health conditions through the CAPSS which currently is directed solely to the CAMHS psychiatrists (CAPs). The survey was distributed through the British Association of Community Child Health (BACCH) newsletters and direct mass-emailing to members via a link to the web-based tool Survey Monkey. Responses were obtained between December 2015 and August 2016.

Respondents were also asked about their special roles or interest in the care provision for CYP with various NDEPs. The respondents were also invited to give free comments, which were analysed with the aim of identifying common themes regarding respondents' experiences of collaborative work with CAMHS through thematic analysis¹⁴.

Patient and Public Involvement

This survey was carried out among clinicians and no direct patient data was required. The survey was designed by members of the CAPSS (Child and Adolescent Psychiatric surveillance Unit of the RCPsych) executive team and discussed with the committee members of BPSU (British Psychiatric Surveillance Unit of the RCPCH). Each of the teams has a permanent PPI Representative sitting on the Executive board. They both advised that patient public involvement approval was not needed.

RESULTS

Characteristics of respondents

A total of 245 respondents working within 180 CCH units across the UK completed the questionnaire. These included professionals working at different grade levels including consultants (75%), specialist associates/staff grades (20%) and others including trainees (5%).

Age range and specialty interests

Two hundred and thirty-seven (97%) respondents worked with CYP aged 0-18 years. Twenty-seven respondents (11%) reported working with young people (YP) aged 19-25 years. These YP often had their transition to adult services delayed (20/27), lacked any suitable adult services (10/27), had complex disabilities or attended special education (9/27). The paediatrician acting in capacity of the Disability Medical Officer was another common reason for managing the older YP (4/27).

Table 1 shows the different areas of CCH involvement, predominantly neurodevelopment (65%), neurodisability (46%) and safeguarding/child protection (40%). Many respondents reported their services as being most deficient in assessment and management of CYP with Foetal Alcohol Spectrum Disorder, attachment and adverse childhood experiences.

Local service configuration for assessment/treatment of different conditions

Participants' responses on whether CAMHS were part of a multi-disciplinary team or joint service provision in their area were almost evenly split, with a slight preponderance of no joint input (51% vs. 43%).

The two conditions with the highest reported joint CCH/CAMHS management were ASD (21%) and ADHD (11%), followed by eating/feeding disorders (8%) and physical symptoms with psychological causes (8%)(Table 2). This confirms that CCH paediatricians are also involved in management of rare MH disorders.

Thematic analysis identified the following recurring issues

Experiences of Joint Paediatric/CAMH service

One hundred and seventeen (48%) of the respondents described their experience of variable degree of local CAMHS integration / joint working with CCH services (Table 3). Common themes identified from the paediatricians' responses included patients' experience of service fragmentation between CCH and CAMHS, limited CAMHS access or availability, high rejection rate for referral to CAMHS, and high rate of CCH referrals from primary healthcare/other agencies who identify the CCH

as the only available option. Some positive patterns of integrated/ collaborative working were also highlighted by a minority of respondents (Table 4).

Some respondents gave examples of great challenges encountered with trying to maintain previous or ongoing multidisciplinary team (MDT)/joint work in the face of financial constraints. Some clinicians have witnessed discontinuation/ service closure in some areas. Obstacles encountered with CAMHS joint-working were staff movement, 'cuts' in staff and resources, and teams/disciplines belonging to different organisations.

Identified gaps in service provision

The limited or lack of services for particular problems/conditions such as associated MH problems in CYP with ASD, ADHD and Foetal Alcohol Syndrome, childhood trauma (abuse, neglect) and attachment difficulties, anxiety, feeding problems, and issues around transition to adult services was commented on by 41/117(35%) (Box 1).

Disjointed services / Disjointed (Fragmented) Care

Participants often commented on the limited or lack of joint work between paediatric and CAMH services despite acknowledged need for more streamlined provision of integrated services. Many respondents noted that services were frequently working in a 'fragmented' or parallel pattern. Common reasons mentioned for limited CAMHS access were lack of resources, including 'cuts' in staff, narrow/high referral/acceptance threshold and 'massive' waiting lists.

Some respondents commented on compartmentalised services that are commissioned based on diagnosis and age grouping rather that the presenting problems such as challenging behaviours, with patients often require holistic/multidisciplinary assessment/intervention. CAMHS or CCH services are often based in different Trusts, with CAMHS linked to adult mental health services rather than children's services. The consequences of disjointed service provision often led to CYP bounced between services, long delays and patients 'falling through the gaps'. CCH Paediatrics would often act as 'safety net' for such CYP, although neither equipped nor commissioned for the interventions required (Box 1).

CCH services overwhelmed by referrals

30/117 (26%) respondents reported ever increasing CCH workload because it is commonly regarded as the "default gateway" for CYP with any MH or behavioural problems for which no other suitable services exist. It was stated that many referrers would often provide little or no other justification for requesting the CCH service than stating that "family/school would like them assessed for ADHD/ASD" or for "behaviour problems". It was also felt that many CYP normally referred to CAMHS are initially referred to the CCH services either because of the long waiting list or inappropriate rejection by CAMHS for "not reaching their threshold".

Some respondents identified their lack of "expertise" for appropriate assessment and management of many CYP with complex MH issues referred to them, such as FAS/FASD and Attachment disorders (Box 1).

Future integration desirable

A small number of participants (n=23; 20%) noted ongoing plans for future collaboration/integrated service in their local areas but not yet functional. Examples of suggestions for service improvement by the respondents included increased joint working/service integration and enhanced (adult and child)

MH training among paediatricians. 9/23 (39%) respondents also emphasized the need for more resources allocated to both CCH and CAMHS and the desirability of enhanced training among primary care professionals.

Good examples of effective Joint work

Well established CCH - CAMHS joint working/ integration in their area was described by 18 respondents. Common areas of collaboration cited include multidisciplinary teams (MDT) for ADHD, LD and Special Educational Needs (Box 1).

Variation in service provision

Concerns about great geographical variation in service provision and the subsequent "postcode lottery" effect was mentioned by 15 respondents. It was noted that several services are configured around different ages (5/8/10/11 years) as cut-offs between CCH and CAMHS in different areas. Other services are restricted to managing specific conditions/diagnosis e.g specialist ASD and ADHD services, with wide variation in the type of professionals/clinicians involved (Box 1).

DISCUSSION

The commonest areas of CCH services engaged in by CCH paediatricians are ADHD and ASD, Neurodisability and Safeguarding/Child Protection. This seems to correlate with findings of the most recent RCPCH/BACCH national survey of CCH services which showed that 99% (85/86) of CCH services provide an ASD assessment clinic, 63% had ADHD clinics and 57-82% provided safeguarding /Child protection services¹.

The model of joint services between CCH and CAMHS team was most frequently reported for ASD and ADHD. The respective NICE guidelines clearly emphasized the importance of multidisciplinary professionals working across several statutory and voluntary agencies in the optimal assessment and management of these neurobehavioural disorders, identifying their coexisting physical health conditions and MH problems^{8,9}.

BACCH/RCPCH in their recent workforce guide identified that "some of the CCH functions, particularly around 'behaviour problems' are split between paediatricians and CAMHS or other specialist teams but by default many families, general practitioners (GPs) and social and education professionals refer to the CCH team when they have concerns". These findings are corroborated by this study. This suggests an indispensable need for close collaboration between CCH and CAMHS teams to ensure optimal care to most of the children referred to the CCH services.

The findings suggest that surveillance restricted to CAPs could miss children with some mental health conditions. Some children with conditions of interest to CAPSS may be seen in significant numbers in CCH services, some of which could struggle to bring their patients to the attention of a CAP.¹⁵

There are many historical and financial explanations for the poor integrated collaboration between services designed for CYP with NDEPs. "Changes to the structure of the NHS in England have left pathways of care fragmented with teams managed by different organisations with different ways of working and a range of outcome and performance monitoring requirements". The responses of many CCH paediatricians identified some recurring themes including: gaps in service provision, disjointed

services, variation in care provision and obstacles to joint working. There were however positive examples of effective collaborative work between CCH and CAMHS.

Advantages of inter-disciplinary cooperation among multi-professional teams have been well documented in several paediatric conditions. Availability of integrated CCH and CAMH specialists will reduce anxiety and confusion for the family of CYP. Children and families do often find transitions between different teams and/or agencies stressful ¹⁶. A recently published meta-analysis of trials of integrated medical and behavioural care demonstrated improved outcomes ¹⁷. An integrated multi-professional service would provide a clearer referral route with a single point of access for patients and their families, and a consistent assessment process across diagnosis boundaries ^{13,15}.

Drawing on the findings from a 3-year qualitative research study, Abbott et al concluded that whilst professionals felt that they were able to offer families a more efficient service, there was concern that the overall impact of multi-agency working on disabled children and their families would be limited. The structures of multi-agency teams/services have potentials for improved information sharing and problem solving, while cutting down a huge amount of duplication.¹⁸

Some examples of best practices highlighted in the survey included provision of community-based psychology services to CYP aged between 0 and 18 years. Joint working and collaboration with other agencies were also identified, including multidisciplinary discussions with the social care services, CAMHS and Paediatrics for CYP under the care of early years services, on Child in Need or Child Protection plans and those under the care of the local authority (CYP in care).

Some examples of functional joint-working with CAMHS could include monthly joint case reviews, agreed referral pathways and joint triage procedures. Even in the absence of full-fledged integrated arrangements between CAMH and CCH services, minimum MH input into the management of various neurodevelopmental disorders and their MH co-morbidities could be clinical psychology service for provision of parenting support, which will help to improve the wellbeing of children and families coping with life's challenges, and prevent future significant MH disorders¹⁹.

Improved joint training between both CAMHS and CCH about common overlapping conditions would help professionals to function more effectively in recognising and hence notifying CAPSS about rare co-morbid MH problems among CYP with a wide range of NDEPs¹³.

Strengths and limitations of the study

One of the strengths of this study is its nationwide scope and presentation of a representative sample of CCH paediatricians' workload and experience of working with CAMHS practitioners in the UK. There are however potential weaknesses of the study that require caution when interpreting the results.

The qualitative analysis of the free comments provided by participants to the national survey has not been followed by any focus group or interview, therefore no opportunity for further in-depth exploration of emerging themes was done. There's a possibility that the participants' perspectives are potentially skewed towards negative experiences as clinicians with negative experiences would be more likely to respond. However, many of the important responses are similar to findings that have been previously reported by other national surveys, including the most recent BACCH/RCPCH workforce survey ¹.

As with any large cross-sectional study, there is potential error of incomplete data set. We however believe that the national scope of respondents is fairly representative of the current picture of clinical practice in the UK.

The survey's strength lies in its national respondent base, providing a panoramic view across diverse geographical and socioeconomic settings. The findings however need to be interpreted with caution, in view of the potential limitations described above.

Conclusion

Most of the community paediatricians highlighted the challenges of service provision for young people above 16 years and the desirability of joint-working with CAMHS. Further nation-wide survey would help better understanding of the mental health needs of CYP and improvement of workforce, training and service planning for the future. In turn this would help in the swifter recognition of MH conditions especially rare presentations.

Acknowledgment:

The authors acknowledge with gratitude the invaluable support of the CAPSS, BPSU, BACCH officials and all the paediatricians who took part in the survey. We are also highly indebted to Dr Michael Morton, consultant child and adolescent psychiatrist and CAPSS Executive Member, who was very instrumental in setting up the study. We also acknowledge the support and encouragement of Dr Simon Lenton, co-chair of BACAPH and Scientific member of BPSU, who kindly reviewed the script and gave constructive recommendations.

"What is already known on this topic"

- Children and young people (CYP) with neurodevelopmental, behavioural and intellectual disorders (NDBEID) have three to four-fold increase in prevalence of co-occurring mental MH disorders
- There is evidence to support need of joint working and reporting between CCH and CAMHS for optimal care of CYP with various NDBEID
- There is need for improved ascertainment for rare disease surveillance among CCH paediatricians and CAP

"What this study adds"

- CCH paediatricians are an important asset in maximising case ascertainment of rare mental health conditions in CYP
- CCH paediatricians are being expected to carry much of the workload previously undertaken by CAMHS.
- Though there were some negative experiences, CCH paediatricians overwhelmingly reported their experience of working with CAMHS as positive despite both services being heavily stretched.

References

- BACCH/RCPCH. Covering all bases Community Child Health: A paediatric workforce guide. RCPCH Sept 2017, London. Online https://www.rcpch.ac.uk/sites/default/files/2018-03/covering all bases community child health a paediatric workforce guide.pdf
- 2. Gillberg C. The ESSENCE in child psychiatry: early symptomatic syndromes eliciting neurodevelopmental clinical examinations. Res Dev Disabil 2010; 31:1543-1551. doi: 10.1016/j.ridd.2010.06.002
- 3. Lindert J. Mental disorders of children with neurodevelopmental disorders: European Journal of Public Health. 2013; 23(suppl 1):101-2. doi: 10.1093/eurpub/ckt126.250
- 4. Betts KS, Williams GM, Najman JM, Alati R. Predicting spectrums of adult mania, psychosis and depression by prospectively ascertained childhood neurodevelopment. J Psychiatr Res. 2016;72:22-9. doi: 10.1016/j.jpsychires.2015.10.013. [Epub 2015 Oct 19].
- 5. Belardinelli C, Raza M, Taneli T. Comorbid Behavioral Problems and Psychiatric Disorders in Autism Spectrum Disorders. Journal of Childhood & Developmental Disorder 2. 2016; 2(2:11): 1-9. doi: 10.4172/2472-1786.100019 [Epub March 11, 2016].
- Romero M, Aguilar JM, Del-Rey-Mejías Á et al. Psychiatric comorbidities in autism spectrum disorder: A comparative study between DSM-IV-TR and DSM-5 diagnosis. International Journal of Clinical and Health Psychology. 16(3), 2016: 266–275. doi: 10.1016/j.ijchp.2016.03.001. [Epub 2016 Jun 3].
- 7. Coventry PA, Hays R, Dickens C et al. 'Talking about depression: a qualitative study of barriers to managing depression in people with long term conditions in primary care'. BioMed Central Family Practice. 2011;12(10): 1-11. doi: 10.1186/1471-2296-12-10 Available at: http://bmcfampract.biomedcentral.com/articles/10.1186/1471-2296-12-10 (Last accessed Sept 2019).
- 8. National Institute for Clinical and Health Excellence (NICE) UK. Attention deficit hyperactivity disorder: diagnosis and management. NICE guideline [NG87]. March 2018. Online: https://www.nice.org.uk/guidance/ng87/resources/attention-deficit-hyperactivity-disorder-diagnosis-and-management-pdf-1837699732933)
- 9. NICE-UK. Autism spectrum disorder in under 19s: recognition, referral and diagnosis [CG128] Dec 2017. (Online: https://www.nice.org.uk/guidance/cg128/resources/autism-spectrum-disorder-in-under-19s-recognition-referral-and-diagnosis-pdf-35109456621253)
- Naylor C, Das P, Ross S et al. Bringing together physical and mental health A new frontier for integrated care. The Kings Fund, London. March 2016. (Online: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Bringing-together-Kings-Fund-March-2016_1.pdf)
- 11. NHS England (NHSE). Five year forward view. 2014. (Online: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf)
- 12. NHS England (NHSE). Child and Adolescent Mental Health Services (CAMHS) Tier 4 Report CAMHS National Review. 2014b. Available online: https://www.england.nhs.uk/wp-content/uploads/2014/07/camhs-tier-4-rep.pdf
- 13. The Child and Adolescent Psychiatry Surveillance System (CAPSS). The Seven Year Report: 2016. Dec 2016. (Online: https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/ccqi-research-and-evaluation/capss/publications/capss-7-year-report-12-16-ii.pdf?sfvrsn=2c3ac09b 2)
- 14. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006; 3: 77–101.

- 15. Eke H, Ford T, Newlove-Delgado T, Price A, Young S, Ani C, Sayal K, Lynn RM, Paul M, Janssens A. Transition between child and adult services for young people with attention-deficit hyperactivity disorder (ADHD): findings from a British national surveillance study. Br J Psychiatry. 2019 Jun 4:1-7. doi: 10.1192/bjp.2019.131. [Epub 2019 Jun 4]
- 16. Department of Health. Closing the Gap: Priorities for essential change in mental health. London 2014. (Online:
 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/281250/Closing _the_gap_V2_-_17_Feb_2014.pdf)
- 17. Asarnow JR, Rozenman M, Wiblin J et al. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. JAMA Pediatr 2015;169:929–37
- 18. Abbott D, Townsley R, Watson D. Multi-agency working in services for disabled children: what impact does it have on professionals? Health and Social Care in the Community. 2005; 13(2), 155–163.
- 19. Children's Commissioner: Briefing: Children's Mental Healthcare in England. Oct 2017. (Online: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/10/Childrens-Commissioner-for-England-Mental-Health-Briefing-1.1.pdf)

Tables and Figures

Table 1 showing the special roles or interests of the respondents

	Percent (%)	No.
Navyadayalayaantal (ingludig = ADUD === 4 ACD)	N=245	Respondents
Neurodevelopmental (including ADHD and ASD)	65%	160
Neurodisability – Epilepsy, sleep, sensory	47%	114
Safeguarding/Child Protection	40%	97
Behavioural Paediatrics - depression	30%	74
Looked-After Children	28%	68
Fetal Alcohol Syndrome/FASD	16%	40
Others (e.g., genetics, research, continence, SEND, Palliative)	21%	52
g end: DHD - Attention Deficit Hyperactivity Disorder; ASD - Autis	m Spectrum Disorder: F	:ASD -Footal Alcoh
pectrum Disorder; SEND - Special Educational Needs and D		ASD -1 Octal Alcol

Legend:

Table 2 Local configuration of service for assessment/treatment of different conditions

Specific conditions ^{&}	Joint service (with CCH and CAMH staff)	CCH alone	CAMHS alone	Other services with no paediatrician or CAP
ASD	21%	93%	47%	8%
ADHD	11%	68%	61%	3%
Eating/Feeding Disorders	8%	56%	74%	6%
Physical Symptoms with Psychological Causes	8%	64%	52%	4%
Learning Disability	6%	92%	37%	6%
Attachment Disorder	4%	37%	63%	8%
Psychological Effects of Trauma/Neglect	4%	30%	66%	13%
Emotional Disorders (Anxiety/OCD)	2%	30%	87%	8%
Tourette's syndrome	1%	63%	66%	3%
Self-Harm/Suicidality	1%	15%	98%	4%
Depression	1%	13%	99%	4%
Psychosis and Bipolar Disorder	1%	2%	98%	1%
FAS	0.4%	90%	14%	4%

ADHD - Attention Deficit Hyperactivity Disorder; ASD - Autism Spectrum Disorder; FASD- Foetal Alcohol Spectrum Disorder; CCH – Community Child health; CAP - Child and Adolescent Psychiatrist; CAMH - Child and Adolescent Mental health; FAS - Fetal Alcohol Syndrome; OCD – Obsessional Compulsive disorder; SEND - Special Educational Needs and Disability

[&] Proportion of respondents describing the different service configurations

Table 3 showing the various degree of CAMHS - CCH integration / joint working

Type of collaboration	No of comments		
Regular joint CAMHS working	12		
Dx-specific-ASD, complex ADHD, LD	34		
Ad-hoc joint clinic, or informal 13			
Discussion			
Psychologist	7		
Discontinued joint-working	7		
Planned for the future	2		

Legend:

Dx –Disease/disorder; ADHD - Attention Deficit Hyperactivity Disorder; ASD - Autism Spectrum Disorder; LD - Learning Disorders; CAMHS - Child and Adolescent Mental Health Services

Table 4 Emerging themes of paediatricians' experience of joint working with CAMHS

1	N = 117 (%)
Large unmet needs, Common problems that do not meet CAMHS referral threshold, non-existent services for some conditions, failure of transition to adult serviced	41 (35%)
Patient and family frustruation, discontinuity of care, and uncertainties, duplication of efforts	36 (31%)
Professionals forced to offer services outside their competencies with no proper training, poor quality services, and risk of harm to patients	30 (26%)
Examples of planned processes for greater integration of services	23 (20%)
Some examples of good practice with integrated services	18 (15%)
Clinical discrimination, inequality, postcode lottery	15 (13%)
	Patient and family frustruation, discontinuity of care, and uncertainties, duplication of efforts Professionals forced to offer services outside their competencies with no proper training, poor quality services, and risk of harm to patients Examples of planned processes for greater integration of services Some examples of good practice with integrated services

Legend:

Box 1 showing some examples of responses for the emerging themes of CCH Paediatricians' experience of joint working with CAMHS

Theme	Examples of responses
Gaps in service provision	 'CAMHS do not deal with anxiety related to ASD. They expect paediatricians to deal with this.' 'No service for management of challenging behaviour, anxiety and mood disorder observed as part of ADHD/Autism.' 'We also have difficulties accessing therapeutic support for children with neurodevelopmental conditions e.g. ASD with anxiety as it is labelled as "part of the expected with this condition" therefore does not reach the threshold for CAMHS.' 'Very limited support for attachment/trauma, except for looked after children. Many children on community paediatric caseload (e.g. with ADHD and likely trauma) have these issues, very difficult to access support.' 'Anxiety and OCD seem to fall between gaps in services and actually may be referred to voluntary organisations but services do not appear robust. Locally, lots of the above are referred to community paediatrics because services that used to see children (e.g. clinical psychology) with anxiety or feeding issues no longer see these cases unless there is an underlying mental health issue.' 'Transition is a challenge. A lot of services end at 18th birthday or we have to transition to GP but the YP with neurodisability often in special school (where I do clinics) until past 20 – so difficult to know when to discharge.'
Disjointed services and disjointed care	 'There is poor joint working with CAMHS services here. They reject increasing numbers of referrals which are then sent on to us, whether or not we have the expertise required.' 'There is often involvement from both services but not a joint service, children are seen separately.' 'I feel that many of our patients would benefit from both community paediatrics and CAMHS involvement but joint working does not happen regularly.' 'Most patients are automatically referred to the community paediatric services because CAMHS will almost invariably reject all referrals and the primary care has no other place to refer children with complex medical needs other than the community paediatrics.' 'Patients are constantly bounced between CAMHs and community paediatrics. It is almost impossible to get any intervention from CAMHS for children who are already seeing a community paediatrician (as a consultant community paediatrician we are unable to get a consultant psychiatry review in complex cases).' 'As paediatricians we try to work within the areas of our expertise/training but are under constant pressure to see children who should be being seen in CAMHS but who are repeatedly turned down as not meeting their criteria -

which seems to be limited to severe mental illness. This is what happens when
CAMHS service is part of an adult mental illness service rather than integrated
with children's services.'

'Many of the CAMHS services have been given to school nurses, untrained staff who are unable to give families formulations or explanations for the child's behaviours which leads to dissatisfaction. The Community Paediatric team is holding responsibility for a large number of children who actually require psychological or psychiatric input which is not provided locally.'

CCH services often overwhelmed by referrals

- lots of the above are referred to community paediatrics because services that
 used to see children (e.g. clinical psychology) with anxiety or feeding issues
 no longer see these cases unless there is an underlying mental health issue.
- Children often present with 'behaviour problems' to the community paediatrician where it is not obvious from the referral information what the underlying cause may be
- Community Paediatrics sees many children with anxiety who do not reach CAMH threshold.
- Sometimes when the issues are psychological other agencies will find the wait time to see CAMHS unacceptable and then modify their referral to include, for example, autism and ask community paediatrics to see.
- It is very frustrating because then the problems are sent to the paediatric team, we have neither the skills nor the resources to deal with many of the problems, nor are we commissioned to do so
- Children don't usually present with a diagnosis! They present with a behaviour.
 CAMHS usually doesn't accept referrals of preschool children until they have seen a paediatrician
- There is a huge number of children who end up being supported/managed for their emotional/mental health difficulties by paediatrics long term as tier 2 CAMHS only provide low level and short term work (6 - 8 weeks).

Future integration desirable

- 'There is a huge unmet need to facilitate joint working between CAMHS and community paediatrics. Routine care for neurodevelopmentally different children should belong to community paediatric teams supported as needed by CAMHS whilst children with the more severe depressive or psychotic disorders should be rapidly supported by senior members of the CAMHS team and CAMHS should be more easily accessible for children with difficult to manage emotional problems.'
- 'Need for more joined up service as it is very fragmented and does not meet needs of the family and child.'
- 'I strongly feel that joint work between Child Psychiatrist and Paediatricians is required.'
- 'We need national recognition that CAMHS does include children and to redefine mental health which has become an excuse to not see anyone unless they've already suicided, or on deaths door with anorexia.'

Good examples of effective Joint work	 'ADHD multidisciplinary team with clinical nurse specialists and clinical psychologist' 'ADHD nurse (CAMHS) does joint clinic with paeds (in assessment pathway)' 'This is both a formal (with LD/MH team) and informal arrangement (for neurodevelopmental disorders) established to develop better working together of teams and to avoid duplication of service' 'Joint clinic with CAMHS worker at SEND special school' 'There is almost no joint working between us except in the LD CAMHS service.'
Variation in service provision	 'ASD under 5 is assessed by psychologists from child disability team, which does not include either paediatrics or CAMHS Physical symptoms with psychological causes will be seen by paediatricians and health psychologist who sits within paediatric team. Eating disorders (anorexia nervosa etc.) will be seen by CAMHS. They may also be seen by paediatrics, but not as part of a joint team. Feeding problems will be seen by paediatrics.' 'ASD is split with under 10s seen by paediatricians and over 10s by CAMHS' 'Under 5s with suspected ASD are assessed in Paediatrics. Over 5s with suspected ASD are assessed by CAMHS, but may be seen in Paediatric first.' 'I cover two hospitals which have different CCGs so services differ slightly depending which hospital catchment area they live in.' 'Currently our services are fragmented. There is no service for ADHD for 6 - 8 year olds; 8 - 11 ADHD and ASD are being diagnosed by a private provider and there is lack of clarity about ongoing follow up. ADHD and ASD in over 11s are seen by CAMHs. There is no mental health input for primary school aged children unless they are presenting with critical issues.'
egend:	
Total Respondents	S = 117

Legend:

CAPSS Survey of Community Paediatricians
We wish to know about Community Paediatricians involvement in the care of children and adolescents with specific mental health conditions. This information will help us to understand the validity of the Child and Adolescent Psychiatry Surveillance System process.
*1. Does your work in community paediatrics involve clinical work with patients?
C Yes
C No
Any Comment

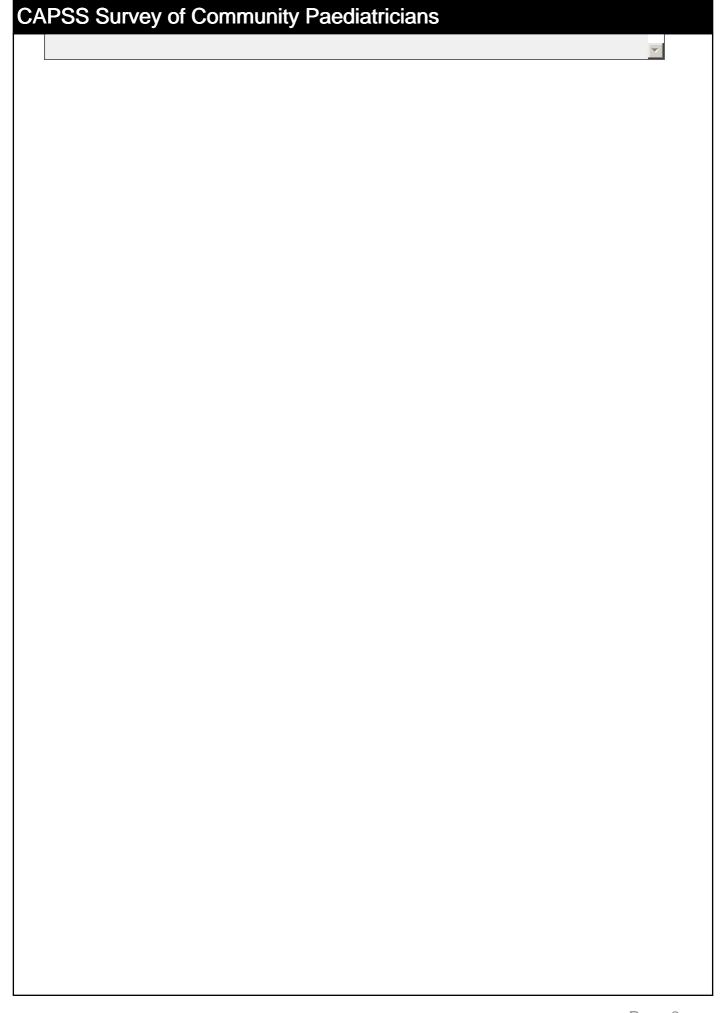
CAPSS Survey of Community Paediatricians

*2. Does your work involve both acute and community paediatric patients?	
C Yes	
O No, all my work is in community paediatrics	
No, all my work is in acute paediatrics	

CAF	PSS Survey of Community Paediatricians
3. V	Vhat is your grade?
0	Consultant
0	Associate Specialist
0	Staff Grade
0	Other Non-Consultant Career Grade
0	Trainee
4. [Oo you have a special role or special interest in one or more of the following?
	ase answer all that apply
	Safeguarding/Child Protection
	Looked After Children
	Neurodevelopmental (including ADHD and ASD)
	Neurodisability
	Foetal Alcohol Syndrome
	Behavioural Paediatrics
	Other (please specify)
	_
	v.

CAPSS Survey of Community Paediatricians		
Please answer the questions that follow about	all areas of your clinical work.	
and/or a part of the service you work	ment of mental health disorders part of your job plan k in?	
© Yes		
O No		
Other		
Please specify		
*6. What is the age range you are i	nvolved with in your clinical work?	
Please answer all that apply		
Less than 5		
☐ 5-11		
☐ 11-18		
Any Comment		
	$\overline{\mathbf{y}}$	

*7. Please indicate which service(s) a child/adolescent will attend for assessment/treatment if they present in your catchment population with one of the following conditions: (Please answer in relation to the age range of your service, this may involve checking more than one box for each condition)					
	My Service (WITH a Community Peadiatrician)	Another Service WITH a Community Paediatrician or Paediatrician	A Service WITH a Child and Adolescent Psychiatrist	Any Service with NO Input from Paediatricians and Child and Adolescent Psychiatrists	Don't know
Alcohol and Drug Problems (Includes ntoxication)					
Psychosis					
Mood Disorder Depression/Bipolar)					
Emotional Disorder Anxiety/OCD)					
sychological Trauma					
sychological Disorder ssociated with Physical symptoms					
eeding Disorders Avoidant/Restrictive Food ntake Disorders)					П
ating Disorder					
elf Harm and Suicidality					
earning Disability					
utism Spectrum Disorder					
,DHD					
ourettes					
Other Neurodevelopmental Disorders					
aggressive and Disruptive Behaviour					
buse/Neglect					
attachment Disorder					
ooked After Children					
oetal Alcohol Syndrome					

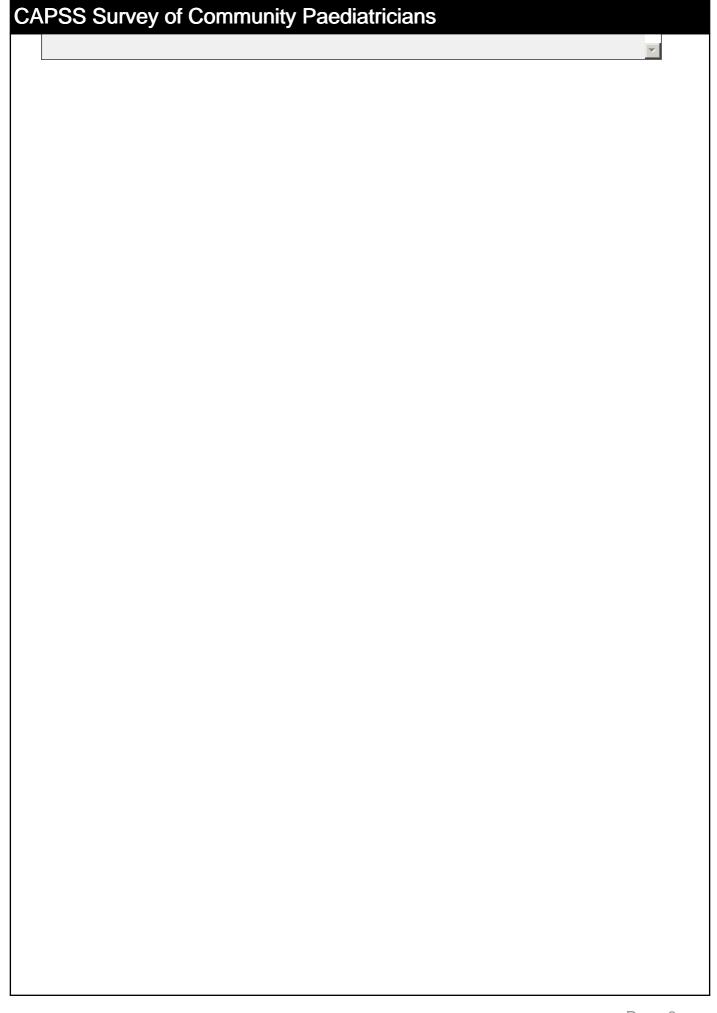


CAPSS Survey of Community Paediatricians

8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involement in their assessment or care.

*"Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent.

	Always/Mostly (>75%)	Often (50%-75%)	Sometimes (25%- 50%)	Rarely/Never (<25%)	Don't know
Alcohol and Drug Problems (Includes Intoxication)	O	0	O	O	O
Psychosis	O	0	0	0	0
Mood Disorder (Depression and Bipolar)	0	O	0	0	0
Emotional Disorder (Anxiety/OCD)	O	O	O	O	O
Psychological Trauma	0	0	0	0	0
Psychological Disorder associated with Physical Symptoms	0	0	O	0	0
Feeding Disorders (Avoidant/Restrictive Food Intake Disorders)	O	0	0	О	©
Eating Disorder	O	0	0	0	0
Self Harm and Suicidality	O	0	0	0	O
Learning Disability	O	\circ	\circ	\circ	0
Autism Spectrum Disorder	O	0	0	0	0
ADHD	O	\circ	\circ	\circ	0
Tourettes	O	0	0	0	0
Other Neurodevelopmental Disorders	0	O	O	C	O
Aggressive and Disruptive Behaviour	O	O	0	O	0
Abuse/Neglect	O	\circ	\circ	\odot	0
Attachment Disorder	O	O	0	0	O
Looked After Children	0	O	0	O	0
Foetal Alcohol Syndrome	0	0	0	0	0
Any Comment					
					_



CAPSS Survey of Community Paediatricians				
End of Survey				
Thank you very much for your time and help with this survey!				
9. Please indicate in the space below if there is anything else you feel is relevant that				
has not been covered in this survey				

CAPSS Survey of Community Paediatricians

End of Survey

Thank you for your time and willingness to participate in this survey but you can only help if you have a clinical role in community paediatrics.

CAPSS Survey of Community Paediatricians
We wish to know about Community Paediatricians involvement in the care of children and adolescents with specific mental health conditions. This information will help us to understand the validity of the Child and Adolescent Psychiatry Surveillance System process.
*1. Does your work in community paediatrics involve clinical work with patients?
C Yes
O No
Any Comment

CAPSS Survey of Community Paediatricians

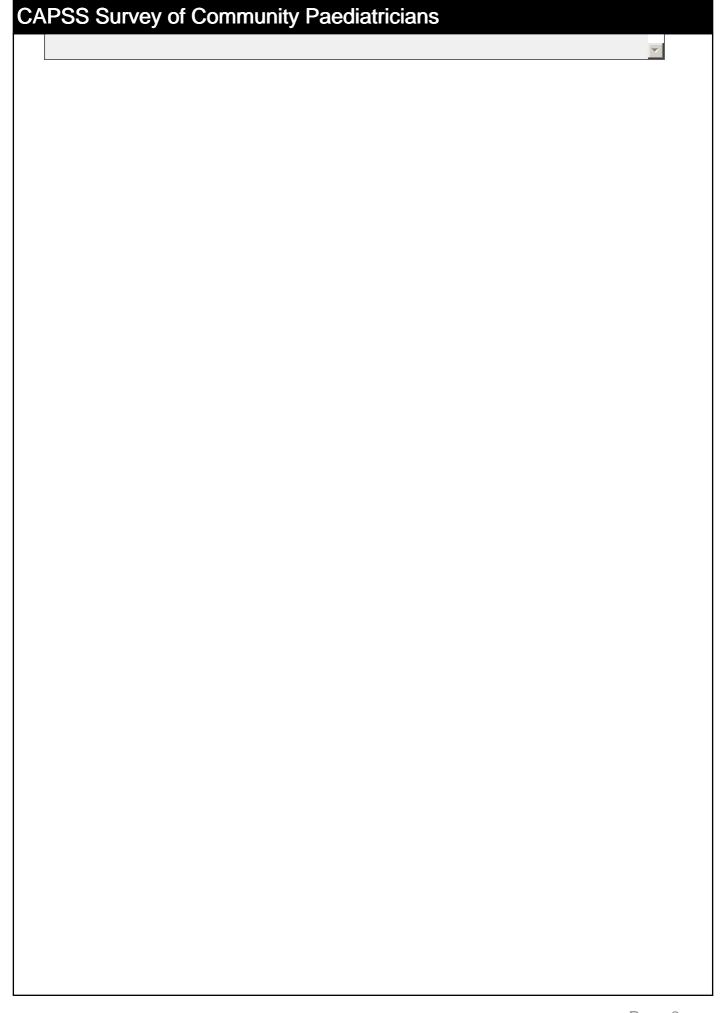
*2. Does your work involve both acute and community paediatric patients?

- Yes
- O No, all my work is in community paediatrics
- No, all my work is in acute paediatrics

CAF	PSS Survey of Community Paediatricians
3. V	Vhat is your grade?
0	Consultant
0	Associate Specialist
0	Staff Grade
0	Other Non-Consultant Career Grade
0	Trainee
4. 0	Oo you have a special role or special interest in one or more of the following?
Ple	ase answer all that apply
	Safeguarding/Child Protection
	Looked After Children
	Neurodevelopmental (including ADHD and ASD)
	Neurodisability
	Foetal Alcohol Syndrome
	Behavioural Paediatrics
	Other (please specify)
	v.

CAPSS Survey of Community Paedic	atricians
Please answer the questions that follow about all areas of	
*5. Is the assessment and/or treatment of and/or a part of the service you work in?	mental health disorders part of your job plan
C Yes	
O No	
C Other	
Please specify	
fst6. What is the age range you are involved	with in your clinical work?
Please answer all that apply	
Less than 5	
□ 5-11	
☐ 11-18	
Any Comment	

*7. Please indicate which service(s) a child/adolescent will attend for assessment/treatment if they present in your catchment population with one of the following conditions: (Please answer in relation to the age range of your service, this may involve checking more than one box for each condition)									
	My Service (WITH a Community Peadiatrician)	Another Service WITH a Community Paediatrician or Paediatrician	A Service WITH a Child and Adolescent Psychiatrist	Any Service with NO Input from Paediatricians and Child and Adolescent Psychiatrists	Don't know				
vicohol and Drug Problems (Includes Intoxication)					П				
Psychosis									
lood Disorder Depression/Bipolar)									
motional Disorder Anxiety/OCD)									
sychological Trauma									
sychological Disorder ssociated with Physical ymptoms									
eeding Disorders Avoidant/Restrictive Food stake Disorders)									
ating Disorder									
elf Harm and Suicidality									
earning Disability									
utism Spectrum Disorder									
DHD									
ourettes									
Other leurodevelopmental visorders									
ggressive and Disruptive ehaviour									
buse/Neglect									
ttachment Disorder									
ooked After Children									
oetal Alcohol Syndrome									
ny Comment									



CAPSS Survey of Community Paediatricians

8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involement in their assessment or care.

*"Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent.

	Always/Mostly (>75%)	Often (50%-75%)	Sometimes (25%- 50%)	Rarely/Never (<25%)	Don't know
Alcohol and Drug Problems (Includes Intoxication)	0	0	O	0	0
Psychosis	0	0	O	O	0
Mood Disorder (Depression and Bipolar)	n O	0	O	0	0
Emotional Disorder (Anxiety/OCD)	O	O	O	O	0
Psychological Trauma	O	0	O	0	0
Psychological Disorder associated with Physical Symptoms	0	0	O	0	0
Feeding Disorders (Avoidant/Restrictive Food Intake Disorders)	O	0	O	O	0
Eating Disorder	0	O	O	O	0
Self Harm and Suicidality	O	0	O	O	0
Learning Disability	O	0	O	0	0
Autism Spectrum Disorder	O	0	O	0	0
ADHD	\circ	0	O	0	0
Tourettes	0	0	0	0	0
Other Neurodevelopmental Disorders	0	0	O	С	O
Aggressive and Disruptive Behaviour	0	0	O	O	0
Abuse/Neglect	0	0	0	O	0
Attachment Disorder	O	0	0	0	0
Looked After Children	O	0	0	O	\odot
Foetal Alcohol Syndrome	0	0	0	0	0
Any Comment					



CAPSS Survey of Community Paediatricians							
End of Survey							
Thank you very much for your time and help with this survey!							
9. Please indicate in the space below if there is anything else you feel is relevant that							
has not been covered in this survey							

CAPSS Survey of Community Paediatricians

End	OT.		-
	\mathbf{U}		-

Thank you for your time and willingness to participate in this survey but you can only help if you have a clinical role in community paediatrics.

Appendix

survey Questions	5		
1. Does your wo	rk in community	paediatrics	involve clinical work with patients?
□ Yes		No.	
Any Com	nment		
2 Does your wo	rk involve both	acute and co	mmunity pandiatric nationts?

- 2. Does your work involve both acute and community paediatric patients?
- ☐ Yes No, all my work is in community paediatrics ☐ No, all my work is in acute paediatrics
- 3. What is your grade?
- ☐ Consultant☐ Associate Specialist ☐ Staff Grade ☐ Other Non-Consultant Career Grade ☐ Trainee
- 3. Do youhaveaspecialroleorspecialinterestinoneormoreofthefollowing? Please answer all that apply
 - Safeguarding/Child Protection
 - Looked After Children
 - Neurodevelopmental (including ADHD and ASD)
 - Neurodisability
 - Foetal Alcohol Syndrome
 - Behavioural Paediatrics
 - Other (please specify)
- 5. Is the assessment and/or treatment of mental health disorders part of your job plan and/or a part of the service you work in?
 - □ Yes □ No □ Others (Please specify)
- 6. What is the age range you are involved with in your clinical work? Please answer all that apply
 - Less than 5
 - 5-11
 - 11-18
 - Any Comment?
- 7. Please indicate which service(s) a child/adolescent will attend for assessment/treatment if they present in your catchment population with one of the following conditions:

(Please answer in relation to the age range of your service, this may involve checking more than one box for each condition)

	My Service	Another	A Service	Another	Don't
	(WITH a	Service WITH a	WITH Child	Service WITH	know
	Community	Community	and	input from	
	Peadiatrician)	Peadiatrician	Adolescent	Peadiatricians	
		or	Psychiatrist	and	
		Peadiatrician		Adolescent	
				Psychiatrist	
Alcohol and Drug					
Problems (Includes					
Intoxication)					
Psychosis					
Mood Disorder				_	

(Depression/Bipolar)			
Emotional Disorder			
(Anxiety/OCD)			
Psychological			
Trauma			
Psychological			
Disorder associated			
with Physical			
Symptoms			
Feeding Disorders			
(Avoidant/Restrictive			
Food Intake			
Disorders)			
Eating Disorder			
Self Harm and	V		
Suicidality			
Learning	/X .		
Disability			
Autism Spectrum			
Disorder			
ADHD			
Tourettes	•		
Other			
Neurodevelopmental Disorders			
Aggressive and			
Disruptive Behaviour			
Abuse/Neglect			
Attachment Disorder			
Looked After			
Children			
Foetal Alcohol		7	
Syndrome			
Any Comment			

8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involvement* in their assessment or care.

^{*&}quot;Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent).

		Always/Mostly	Often	Sometimes	Rarely/Never	Don't
		(>75%)	(50%-75%)	(25%-50%-	(<25%)	know
Alcohol and	d Drug					

Problems (Includes			
Intoxication)			
Psychosis			
Mood Disorder			
(Depression/Bipolar)			
Emotional Disorder			
(Anxiety/OCD)			
Psychological Trauma			
Psychological Disorder			
associated with Physical			
Symptoms			
Feeding Disorders			
(Avoidant/Restrictive			
Food Intake Disorders)			
Eating Disorder			
Self-Harm and	<u></u>		
Suicidality			
Learning Disability			
Autism Spectrum			
Disorder			
ADHD	•		
Tourettes			
Other			
Neurodevelopmental			
Disorders			
Aggressive and			
Disruptive Behaviour			
Abuse/Neglect			
Attachment Disorder			
Looked After Children		6	
Foetal Alcohol			
Syndrome			
Any Comment			

9. Please indicate in the space below if there is anything else you feel is relevant that has not been covered in this survey

Thank you very much for your time and help with this survey!

End of Survey

BMJ Paediatrics Open

Involvement of Community Paediatricians in the care of children and young people with mental health difficulties in United Kingdom: Implications for case ascertainment by Child and Adolescent Psychiatric, and Paediatric Surveillance Systems

Journal:	BMJ Paediatrics Open
Manuscript ID	bmjpo-2020-000713.R2
Article Type:	Original research
Date Submitted by the Author:	08-Dec-2020
Complete List of Authors:	Ayyash, Hani; Southend University Hospital NHS Foundation Trust, Paediatrics; RCPCH, British Paediatric Surveillance Unit Ogundele, Michael; Bridgewater Community Healthcare NHS Foundation Trust, Halton Community Paediatrics Lynn, Richard; University College London Research Department of Epidemiology and Public Health, Institue Of Child Health; Royal College of Paedaitrics, BPSU Schumm, Tanja-Sabine; NHS Greater Glasgow and Clyde, Child and Adolescent Psychiatry Ani, Cornelius; Imperial College London Faculty of Medicine, Child and Adolescent Psychiatry; Surrey and Borders Partnership NHS Foundation Trust, Child and Adolescent Psychiatry
Keywords:	Child Psychiatry, Epidemiology, Health services research, Qualitative research

SCHOLARONE™ Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our licence.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which Creative Commons licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

TITLE:

Involvement of Community Paediatricians in the care of children and young people with mental health difficulties in United Kingdom: Implications for case ascertainment by Child and Adolescent Psychiatric, and Paediatric Surveillance Systems

AUTHORS:

Hani F Ayyashis, Michael O Ogundele, Richard M Lynns, Tanja-Sabine Schumm, Cornelius Ani

AFFILIATIONS:

- Consultant Developmental Paediatrician, Mid and South Essex University Hospitals Group, Southend University Teaching Hospital, UK
- 2. Consultant Developmental Paediatrician, Halton Community Paediatrics Unit, Bridgewater Community Healthcare NHS Foundation Trust, Runcorn, UK
- 3. Scientific Committee Member, British Paediatric Surveillance Unit, Royal College of Paediatrics and Child Health, UK
- 4. Executive Committee Member, Child and Adolescent Psychiatric Surveillance System, Royal College of Psychiatry, UK
- 5. Scientific Coordinator, British Paediatric Surveillance Unit, Royal College of Paediatrics and Child Health, UK
- 6. Child and Adolescent Psychiatrist, NHS Greater Glasgow and Clyde, UK
- 7. Honorary Clinical Senior Lecturer, Imperial College London, and Consultant Child and Adolescent Psychiatrist, Surrey and Borders Partnership NHS Foundation Trust, UK

Corresponding Author:

Dr Hani F Ayyash Southend University Hospital NHS Foundation Trust, Paediatrics Department, Westcliff-on-Sea, Essex, SSO ORY, UK

Email: hfayyash15@gmail.com

Contributorship Statement:

HA conceived the idea. HA and JS redesigned the survey material, HA, MO and CA analysed the data and prepared the manuscript draft, RL critically reviewed the manuscript. All authors approved the final manuscript as submitted and agreed to be accountable for all aspects of the work.

ABSTRACT

Objective: To ascertain the extent to which community paediatricians are involved in the care of children with mental health conditions in order to determine which difficulties are appropriate for single or joint surveillance by the British Paediatric Surveillance Unit (BPSU) and Child and Adolescent Psychiatry Surveillance System (CAPSS).

Design: An online survey of the 1,120 members of the British Association of Community Child Health (BACCH) working in 169 Community Child Health (CCH) Services in the UK.

Results: A total of 245 community paediatricians responded to the survey. This represents 22% of members of BACCH but likely to have covered many of the 169 CCH Units because participants could respond on behalf of other members in their Unit. The survey showed that Children and Young People (CYP) with neurodevelopmental conditions presented more frequently to paediatrics than to Child and Adolescent Mental Health Services (CAMHS). In addition, a sizeable proportion of CYP with emotional difficulties presented to paediatricians (e.g. 29.5% for anxiety / OCD, and 12.8% for depression) – mainly due to difficulty with accessing CAMHS. More than half of the community paediatricians are involved in the care of CYP with anxiety and OCD, while 32.3% are involved in the care of those with depression.

Conclusion: There is significant involvement of community paediatricians in the care of CYP with mental health conditions. Involvement is highest for neurodevelopmental conditions, but also significant for CYP with emotional difficulties. The implication of the findings for surveillance case ascertainment is that joint BPSU and CAPSS is recommended for surveillance studies of neurodevelopmental conditions. However, for emotional disorders, single or joint surveillance should be made based on the specific research question and the relative trade-offs between case ascertainment, and the additional cost and reporting burden of joint surveillance. Single CAPSS studies remain appropriate for psychosis and bipolar disorder.

INTRODUCTION

Epidemiological studies are important for understanding disease trends and planning services.¹ Large scale epidemiological studies help to determine reliable population estimates of common health conditions. However, for less common disorders, large epidemiological studies may not identify enough cases to enable the required analyses. For example, despite a very large representative sample size of 9,117 children, the "Mental Health of Children and Young People in England Survey" stated that the "sample was too small to reliably detect change in a low prevalence condition" .² Therefore, using typical epidemiological surveys to study uncommon conditions, may require prohibitively large sample sizes that would render such studies unaffordable and impractical.

On the other hand, surveillance methodology provides a cheaper and more efficient alternative epidemiological approach to studying uncommon conditions. This methodology was pioneered by the British Paediatric Surveillance Unit (BPSU) in 1986. The BPSU has so far conducted 120 surveillance studies many of which have had important policy impact. Indeed, this surveillance strategy developed by the BPSU has been referred to as a success story of modern paediatrics. The success has led to its replication for paediatric research in many countries (Lynn and Reading 2020). Also, similar methodology has been developed in the UK for Obstetrics and Gynaecology, Ophthalmology and, Child and Adolescent Mental Health. The latter is referred to as the Child and Adolescent Psychiatric Surveillance System (CAPSS) (https://www.rcpsych.ac.uk/docs/default-source/default-document-library/capss-10-year-report-final.pdf?sfvrsn=e3402268 2).

Although surveillance methodology is typically applied to uncommon disorders, the strategy can equally be used to study aspects of common conditions. Examples include rare events associated with common conditions or practices such as the incidence of neuroleptic malignant syndrome

associated with use of antipsychotic medications. Surveillance strategy can also apply to studies of uncommon subtypes of common conditions such as Obsessive Compulsive Disorder related to Paediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS).

The principle of surveillance methodology is described in detail elsewhere^{5,6} and illustrated in Figure 1. Using CAPSS as example, every month, the Surveillance Team based at the Royal College of Psychiatrists send emails to all consultant child and adolescent psychiatrists in the UK and Republic of Ireland (ROI) requesting them to report whether they have seen a new case of the condition being studied. Consultants who report that they have seen cases are contacted by the researchers (who are independent of CAPSS) to obtain the relevant research data about the case. BPSU and CAPSS operate active case surveillance, which means that consultants are also requested to report if they have not seen a case. This approach helps to monitor response rate and compliance.³

Given that incidence rate is one of the main outcomes of surveillance studies³, it is essential that the estimation of this parameter is reliable in order to have policy impact. The reliability of incidence estimates requires that case ascertainment is as complete as possible.³ This is particularly crucial for less common conditions because missing a few cases can significantly skew the calculated incidence.

One of the surveillance strategies to improve case ascertainment is multiple data sourcing^{1,7} such as among different professional groups who are likely to see or know of cases of the conditions being studied.³ Thus, for conditions commonly seen by both Paediatricians and Child Psychiatrists, ascertainment is improved by concurrent surveillance through BPSU and CAPSS. A joint Royal College of Paediatrics and Child Health (RCPCH) / British Association of Community Child Health (BACCH) workforce guide identifies child mental health conditions such as Attention Deficit and Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) as within the roles and expertise of community paediatricians.⁸ It is also well recognised that other mental health conditions such as Eating Disorders and Conversion Disorder require paediatric support for optimum assessment and treatment. This understanding has informed joint BPSU/CAPSS surveillance studies of eating disorders⁹, conversion disorder¹⁰ and ADHD transition¹¹.

The importance of joint BPSU/CAPSS surveillance is well illustrated in the conversion disorder study whereby cases reported by paediatricians and child psychiatrists had only a very small overlap of 4.2%. This study found that surveillance of either professional group alone would have reduced case ascertainment by 59% or 36%% respectively. This strongly underlines the importance of joint BPSU and CAPSS surveillance for better case ascertainment of conditions that commonly interface between Paediatric and Child and Adolescent Mental Health Services (CAMHS).

In addition to joint studies, both BPSU and CAPSS conduct single-Unit studies for conditions that are considered to be seen almost exclusively by paediatricians (for BPSU) or child psychiatrists (for CAPSS). CAPSS has conducted single-Unit studies of non-affective psychosis¹³, paediatric bipolar disorder¹⁴, and early onset depression. These CAPSS-only studies ran on the assumption that adequate case ascertainment is achievable for these conditions through surveillance of only child psychiatrists. It was considered that for such conditions, joint CAPSS and BPSU surveillance would achieve little additional case ascertainment at huge extra costs and increased reporting burden on paediatricians who are unlikely to see affected children.

However, while the assumption that paediatricians are not seeing children with the aforementioned types of mental health conditions appears to have face validity, this hypothesis would benefit from empirical evaluation. Although community paediatrics workforce guide⁸ states that community paediatricians are not usually trained to assess and treat these types of mental health conditions, the document acknowledged that the underfunding of CAMHS may lead to increased pressure on community paediatricians to become involved in the management of more mental health difficulties. The latter point is hinted at by the increase in the proportion of Community Paediatric Services that manage ADHD from 15% in 2006 to 63% in 2016.⁸

Thus, the first objective of this study is to ascertain the extent to which community paediatricians may be involved in the care of children with mental health conditions, the types of mental health conditions they are involved in providing care for, and the reasons for their involvement. These findings could help to determine with more clarity which child and adolescent mental health conditions are appropriate for CAPSS-only surveillance and which ones justify the additional cost and effort of dual BPSU-CAPSS surveillance to maximise case ascertainment. The second objective of this study is to explore the challenges and opportunities in joint working between Community Paediatricians and CAMHS. However, due to space limitation, data from this second objective is not included in the current paper, but will be the subject of a separate publication. The study focused on community paediatricians because the structure of health services for children in the UK indicate that these are the paediatricians who are more likely to interface with CAMHS.⁸ Furthermore, Community Paediatricians often work with children who are likely to have experienced childhood adversities that increase the risk of mental health difficulties.¹⁵ Examples of such young people include Children Looked After by the State and those involved in adoption and fostering, and or Safeguarding procedures.¹⁶

METHODS

Survey methods.

This survey adapted questions and methodology used by an earlier CAPSS survey of consultant child and adolescent psychiatrists.¹⁷ Two experienced community paediatricians and a specialist in surveillance methodology reviewed the earlier survey questions and adapted them for completion by community paediatricians. The final version of the questionnaire was agreed by consensus. The survey included structured questions with multiple response options and one Likert rating scale. The structured questions sought information on the community paediatricians' special areas of interest, experience of joint working with CAMHS, and presentation of Children and Young People (CYP) with mental health conditions to their services. The community paediatricians used the Likert scale to rate the likelihood of their involvement in the assessment or care of CYP with specific mental health conditions. The response options were "Always/Mostly (>75%)", "Sometimes (25%-75%)", "Rarely/Never (<25%)", "Don't know", and "Not applicable". The structured responses are presented in the results as frequencies and percentages. Provision was made for free text comments to help to further understand the context for answers to the structured questions. Thematic content analysis was used to identify common themes within the participants' free text comments. The survey was discussed by the Executive Committee members of CAPSS as well as by members of the BPSU. In line with current UK research governance framework, ethical approval was not required as this was a completely anonymous survey with entirely voluntary participation by persons not classified as "vulnerable".

Survey administration

The survey was distributed through the British Association of Community Child Health (BACCH) newsletters and direct mass-emailing to members via a link to the web-based tool Survey Monkey (www.surveymonkey.com). Responses were obtained between December 2015 and August 2016. BACCH had a total membership of 1,120 in 2015. However, in order to reduce response burden and still achieve national coverage, respondents were advised that they could choose to complete one questionnaire on behalf of their Service, Unit or Department. There were 169 distinctly managed Community Child Health Services in the UK in 2015.8

Patient and Public Involvement

Page 6 of 39

This survey was carried out among clinicians and no direct patient data was required. The BPSU has a permanent PPI Representative on the Executive board, who provided support for the study. This is acknowledged in the paper.

RESULTS

Respondents' characteristics

A total of 245 community paediatricians responded to the survey. Although this represents 22% of the 1120 members of BACCH in 2015 (excluding retired, affiliate and overseas members), we believe that the responses provide a good coverage of the 169 Community Child Health (CCH) units in the UK because respondents were advised that they could choose to complete one questionnaire on behalf of their Unit / Service. All the respondents stated that they worked clinically in community paediatrics.

Most respondents were Consultants 177 (75.3%) but responses were also received from Associated Specialists 37 (15.7%), Staff Grades 9 (3.8%), and other grades of doctors such as trainees 12 (5.1%). Table 1 shows that the respondents' most common areas of special interests are in neurodevelopmental conditions 160 (70.5%), neurodisability 114 (50%), child safeguarding 97 (42.7%), and behavioural paediatrics 74 (32.6%).

Joint working with Child and Adolescent Mental Health Services (CAMHS)

The community paediatricians were asked about joint working with CAMHS in order to gain an understanding of how their organisation's structures might moderate their involvement in the care of CYP with mental health conditions. Less than half of the respondents (42.7%) reported that their paediatric services are part of a multidisciplinary team or joint service with CAMHS. Thematic analysis of free text comments showed that the commonest area of joint work is in the assessment and treatment of CYP with ADHD and ASD, more so for the younger age groups. This theme was mentioned 35 times. An example of a related comment is "I work closely with CAMHS regarding children with ASD and do joint assessments for children 2½ to 5years old".

Local pathways for new presentations of child and adolescent mental health conditions.

In order to explore the community paediatricians' contact with CYP with mental health difficulties at the initial part of the patient's care journey, they were asked which service(s) would a child or adolescent attend for assessment and or treatment if they present in the paediatrician's catchment area with the specific mental health conditions listed in Table 2.

Their responses showed that, on the whole, CYP with neurodevelopmental conditions such as ASD, ADHD, and Tourette syndrome present more frequently to paediatrics than to CAMHS. The difference is particularly striking for ASD whereby 93% would present to paediatrics compared with CAMHS (46.7%). The proportion for ADHD and Tourette syndrome is evenly split between paediatrics and CAMHS. Also, there is limited presentation to "joint services" for all conditions including neurodevelopmental disorders.

The above trend is different in relation to emotional difficulties, in that, most CYP with self-harm and suicidal behaviour, depression, anxiety, and Obsessive Compulsive Disorder (OCD) would present to CAMHS (\approxeq 98%). However, a sizeable proportion of CYP with these emotional difficulties may also present to paediatricians (e.g. 29.5% for anxiety / OCD, and 12.8% for depression). Even cases of psychosis and bipolar were reported to present to paediatricians albeit at very low frequencies (1.8%).

Given that the workforce guide for community paediatricians⁸ does not recommend working with CYP presenting with the types emotional difficulties that would typically be seen in CAMHS, the community paediatricians' free text comments were analysed thematically to understand the reasons why such CYP are presenting to paediatric services. The overwhelming reason identified is "difficulty with accessing CAMHS". This concern was mentioned 59 times (which represents 24% of the participating community paediatricians). Four examples of related comments are reported in Box 1.

Involvement of community paediatricians in the assessment or care of children with mental health conditions.

In order to gain further understanding about how much community paediatricians are likely to have some involvement with the care of children with mental health conditions attending their paediatric services, they were asked to rate the likelihood of them being "aware of" a child attending their service with the mental health conditions in Table 3. "Awareness" of such cases was defined broadly to include direct clinical care for the child or involvement in multidisciplinary team discussion or supervision about the child. This broad definition is in keeping with the level of involvement required for consultants to be able to report a case for BPSU or CAPSS surveillance studies. A consultant only needs to know enough about the case to judge whether the child meets the inclusion criteria for reporting. BPSU and CAPSS encourage consultants to report cases they "know of", even if they believe that someone else might report the case. This practice helps to improve surveillance case ascertainment. The potential for double reporting is preferred to non-reporting because surveillance researchers are able to prevent double-counting of reported cases through a process of deduplication.

By combining the response options of "always" and "sometimes", Table 3 shows that the vast majority of the community paediatricians (above 75%) have some involvement in the assessment or care of children with ASD, ADHD, Tourette syndrome, Intellectual disability, and Foetal Alcohol Syndrome. Between 50 – 75% have some involvement in the assessment or care of children with attachment disorder, eating disorder, and anxiety including OCD. About a third (32.3%) are involved in assessment or care of children with depression, and a small proportion (8.2%) in the care of those with psychosis and bipolar disorder.

DISCUSSION

The main objectives of this study were to ascertain the extent to which Community Paediatricians are involved in the care of children with mental health conditions, the types of mental health conditions they are involved in providing care for, reasons for their involvement, and the implications for case ascertainment for surveillance studies by CAPSS and BPSU. The survey found high levels of community paediatricians' involvement in the assessment and treatment of neurodevelopmental conditions, more so for ASD. The study also found a significant level of presentation of CYP with emotional difficulties to community paediatric services.

The high level of community paediatricians' involvement in the assessment and treatment of CYP with neurodevelopmental conditions like ASD and ADHD is consistent with their expertise, workforce recommendations⁸ and established practice in the UK.¹⁸ The community paediatricians appeared positive about this area of work. There was no free text comment to suggest that any of the paediatricians had concerns about supporting CYP with neurodevelopmental difficulties. Concerns were expressed only when the CYP developed comorbid emotional difficulties which required CAMHS support but this was difficult to access. This concern is consistent with the view that CYP

with neurodevelopmental conditions like ADHD and ASD are best managed holistically within an integrated service model involving both paediatrics and CAMHS.¹⁹

The surveillance implication of the high presentation of neurodevelopmental conditions to community paediatrics supports the current practice of joint BPSU and CAPSS surveillance for such conditions. ²⁰ This practice is exemplified by a recent joint study on ADHD transition which showed that 64% of the cases were reported by paediatricians while 36% were by child and adolescent psychiatrists with no cases dually reported through both BPSU and CAPSS. ¹¹ The high losses of case ascertainment if the study had been a single BPSU or CAPSS study is self-evident.

The community paediatricians reported a significant level of presentation of CYP with emotional difficulties to their services (e.g. 29% for anxiety and OCD). The primary reason for this situation is difficulty with access to CAMHS. The survey found that unlike neurodevelopmental conditions, the community paediatricians expressed concerns that their involvement in the care of CYP with emotional difficulties is beyond their training and expertise. Many suggested that they had to offer help, because the affected CYP would otherwise have no support. The service implications of these concerns are discussed later. However, for purposes of surveillance studies, the significant presentation of CYP with emotional difficulties to community paediatric services could have implications for case ascertainment. The surveillance implication is even more significant if account is taken of the high proportion of community paediatricians who were "aware" of CYP with emotional difficulties in their service. The latter point is based on the fact that a consultant being "aware of" or "knowing of" a case is sufficient for them to make a surveillance report on the case.

The surveillance implication of the significant presentation of CYP with emotional difficulties to community paediatric services requires some nuancing. Joint BPSU and CAPSS surveillance is twice as expensive. It also tasks the goodwill of consultants in both specialities who make voluntary monthly reports about having seen or not seen cases. Maintaining the goodwill of consultants is a crucial factor in sustaining surveillance platforms. This requires careful management of the number of studies in order to prevent excessive reporting burden on consultants. These points indicate that a strong justification should be required to support joint BPSU and CAPSS studies in order to optimally balance the trade-offs between case ascertainment, cost and increased reporting burden on consultants. We recommend that in relation to emotional difficulties, the justification should depend on the specific research question. For example, while OCD is an emotional difficulty, a surveillance study of OCD presentation in the context of PANDAS would require joint BPSU and CAPSS strategy. The separate Executive Committees of BPSU and CAPSS can advise researchers early in the planning of a study regarding whether the research question is likely to require a single or joint surveillance.

BPSU surveillance covers all Consultant Paediatricians in the UK and ROI. However, for some surveillance studies of child and adolescent mental health difficulties where the interface is more likely with community paediatricians (rather than the general body of paediatricians), a case could be made to limit the cost and reporting burden by running a joint CAPSS and BACCH study (instead of joint CAPSS and BPSU). However, there is currently no surveillance infrastructure for only BACCH members.

The very low levels of presentation of CYP with psychosis and bipolar disorder to community paediatrics supports the current practice of CAPSS-only surveillance for such conditions. The additional expense and reporting burden of joint surveillance is unlikely to be justifiable for such cases. However, there could still be circumstances whereby a surveillance study of psychotic patients may require joint BPSU and CAPSS strategy. A potential example would be a study of the incidence of neuroleptic malignant syndrome in CYP treated with antipsychotic medications.

The concern about access to CAMHS, which was raised by almost a quarter of the paediatricians require some brief exploration even though it is less central to the study objective covered in this paper (which is focused on the implication for surveillance case ascertainment). This challenge with

CAMHS access appeared to be pervasive and it generated a lot of frustration among the community paediatricians. Some of the paediatricians indicated that they were reluctantly over-reaching their expertise to help CYP with mental health difficulties that would normally be seen by CAMHS. Many paediatricians formulated the reason for the problem with CAMHS access as underfunding of CAMHS, leading to short staffing, long waiting times, and raised referral threshold to focus on CYP with the most severe mental illnesses. Therefore, several community paediatricians suggested that the main solution is to expand CAMHS capacity. Some of the paediatricians cautioned against the type of token measures that occurred in their own catchment which involved the commissioners rebranding CAMHS without extra resources which resulted in no improvement in access. We hope that the NHS Long Term Plan https://www.longtermplan.nhs.uk/ which has specific commitment of extra resources for CAMHS as well as commitment to closer integration of services would bring about genuine and sustained improvement in access to CAMHS.

Strengths and limitations of the study

One of the strengths of this study is its nationwide scope and presentation of a representative sample of CCH paediatricians' workload and experience of working with CAMHS practitioners in the UK. There are however potential weaknesses of the study that require caution when interpreting the results.

The main limitation of this paper relates to uncertainty about the representativeness of the survey sample. We surveyed members of BACCH as this group of paediatricians are more likely to interface with CAMHS. However, they consisted of just over a quarter of the total UK paediatric consultant workforce of 3996 in 2015 (https://www.rcpch.ac.uk/resources/paediatric-workforce-data-policy-briefing-2017). Although we believe that the 245 respondents provided a good coverage of the 169 CCH Units around the UK, concerns about confidentiality meant that we did not invite data that could link respondents to CCH Units. Thus, the absence of information on the regional spread of the respondents as well as the age and gender distribution means that there is some uncertainty about the degree to which the findings are generalisable.

CONCLUSION

This survey identified a significant involvement of community paediatricians in the assessment and treatment of CYP with mental health conditions. The involvement is highest in relation to neurodevelopmental conditions, and this is in keeping with the expectation and expertise of community paediatricians. However, there is also significant involvement in the care of CYP with emotional difficulties which is mainly due to lack of access to CAMHS. The implication of the findings for surveillance case ascertainment is that joint BPSU and CAPSS continues to be recommended for surveillance studies of neurodevelopmental conditions. For surveillance studies of emotional disorders, a nuanced decision about single or joint surveillance should be made based on the specific research question and the relative trade-offs between case ascertainment, cost and reporting burden. Single CAPSS studies remain appropriate for surveillance studies of psychosis and bipolar disorder. There is urgent need to expand access to CAMHS. This would reduce the need for community paediatricians to over-reach their expertise to support CYP with mental health difficulties whose needs would be better met by CAMHS.

What is already known on this topic?

- ► The British Paediatric Surveillance Unit (BPSU) and Child and Adolescent Psychiatric Surveillance System (CAPSS) study uncommon childhood conditions
- ▶ BPSU and CAPSS conduct single or joint studies based on assumptions about whether the conditions overlap, but these assumptions have not been formally tested.
- Understanding the involvement of community paediatricians in caring for children with mental illnesses can improve decisions about joint or single BPSU and CAPS surveillance

What is this paper adds?

- ► Community paediatricians are highly involved in caring for children with neurodevelopmental conditions, and to some degree those with emotional difficulties, but minimally for psychosis
- ▶ Joint BPSU and CAPSS surveillance of neurodevelopmental conditions is required to maximise case ascertainment but CAPSS-only surveillance is appropriate for psychosis and bipolar disorder
- Surveillance studies of emotional disorders could be joint BPSU and CAPSS or CAPSS-only depending on the specific research question.

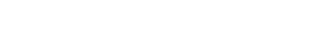
REFERENCES

- Eke H, Janssens A, Downs J, Lynn R, Ani C, Ford T. How to measure the need for transition to adult services among young people with Attention Deficit Hyperactivity Disorder (ADHD): a comparison of surveillance versus case note review methods. *BMC Medical Research Methodology*. (2019a);19: 179. https://doi.org/10.1186/s12874-019-0820-y
- NHS Digital (2017) Mental Health of Children and Young People in England, 2017 Autism spectrum, eating and other less common disorders. https://files.digital.nhs.uk/FB/8EA993/MHCYP%202017%20Less%20Common%20Disorders. pdf (accessed 12-10-2020).
- 3. Lynn R M, & Reading R. Case ascertainment in active paediatric surveillance systems: a report from the British Paediatric Surveillance Unit Ascertainment Group. Archives of disease in childhood.(2020);105(1), 62-68.
- 4. Lynn RM, Avis JL, Reading R, eds. British paediatric surveillance unit 30th anniversary report: facilitating childhood rare disease research for over 30 years. London: British Paediatric Surveillance Unit.(2016).
- 5. Verity C, Preece M. Surveillance for rare disorders by the BPSU. Arch Dis Child. 2002;87:269–71.
- 6. Knowles RL, Smith A, Lynn R, Rahi JS, British Paediatric Surveillance U. Using multiple sources to improve and measure case ascertainment in surveillance studies: 20 years of the British Paediatric Surveillance unit. J Public Health. 2006;28(2):157–65.
- 7. Salotti J A, Nanduri V, Pearce M S, Parker L., Lynn R, & Windebank KP. Incidence and clinical features of Langerhans cell histiocytosis in the UK and Ireland. Archives of disease in childhood. (2009); 94(5), 376-380.
- 8. BACCH/RCPCH. Covering all bases Community Child Health: A paediatric workforce guide. RCPCH Sept 2017, London. Online https://www.rcpch.ac.uk/sites/default/files/2018-03/covering-all-bases_community-child-health-a-paediatric_workforce_guide.pdf
- 9. Nicholls D, Lynn R, Viner R. Childhood eating disorders: British national surveillance study. British Journal of Psychiatry. (2011);198. 295-301
- 10. Ani C, Reading R, Lynn R, Forlee S, Garralda E. Incidence and 12-month outcome of non-transient childhood conversion disorder in the UK and Ireland. British Journal of Psychiatry. (2013); 202, 413-8.
- 11. Eke H, Ford T, Newlove-Delgado T, Price A, Young S, Ani C, Sayla K, Lynn RM, Paul M, Janssens A. Transition between child and adult services for young people with attention-deficit hyperactivity disorder (ADHD): findings from a British national surveillance study. British Journal of Psychiatry.(2019b);. 1-7. doi:10.1192/bjp.2019.131
- 12. Ani C, Reading R, Lynn R, James V, Forlee S, Garralda E.(2011). Child and Adolescent Psychiatry Surveillance System (CAPSS): Epidemiology of Childhood Conversion Disorder in UK and Ireland . Paper presented at the Royal College of Paediatrics and Child Health Conference: BPSU symposium 5th April 2011, Warwick University, UK
- 13. Tiffin, P. A. & Kitchen, C.E.W. Incidence and 12-month outcome of Childhood Non-affective Psychoses: British National Surveillance Study. British Journal of Psychiatry. (2015); 206 (6) 517-518.
- 14. Sharma A, Neely J, Camilleri N, James A, Grunze H, Le Couteur A. Incidence, characteristics and course of narrow phenotype paediatric bipolar I disorder in the British Isles. Acta Psychiatrica Scandinavica. (2016);134(6), 522–532.
- 15. Bick, J., Nelson, C. Early Adverse Experiences and the Developing Brain. Neuropsychopharmacol. (2016);41, 177–196. https://doi.org/10.1038/npp.2015.252
- 16. Ogundele, MO. Profile of Neurodevelopmental and behavioural problems and associated psychosocial factors among a cohort of Looked-After children newly entering into the care of an England Local Authority. Adoption & Fostering. 2020;44(3):255-271.

- 17. Schumm, TS, Morton MJS. National Survey of child and adolescent psychiatrists' clinical activity using the Child and Adolescent Psychiatry Surveillance System (CAPSS). Archives of Disease in Childhood.(2017); 102(Suppl 1). doi: 10.1136/archdischild-2017-313087.121
- 18. Male I, Farr W, & Reddy V. Should clinical services for children with possible ADHD, autism or related conditions be delivered in an integrated neurodevelopmental pathway? Integrated Healthcare Journal.(2020); 2(1), e000037.
- 19. Ogundele MO, Ayyash HF and Ani C. Integrated Services for Children and Young People with Neurodevelopmental and Co-Morbid Mental Health Disorders: Review of the Evidence. J Psychiatry Mental Disord. 2020; 5(3): 1027.
- Ayyash HF, Ford TJ, Janssens A, Eke H, Price A, Morton M. Impact of CAPSS and BPSU in identifying the imminent needs of ADHD patients in transition from children's to adults services across the United Kingdom. Archives of Disease in Childhood.(2018);103(Suppl1), A 191-A 193. Doi: 10.1136/archdischild-2018-rcpch.457.

Acknowledgement

The authors acknowledge with gratitude the invaluable support of the CAPSS, BPSU, BACCH officials and all the paediatricians who took part in the survey. We are also highly indebted to Dr Michael Morton, Consultant Child and Adolescent Psychiatrist and CAPSS Executive Member, who was very instrumental in setting up the study. We also acknowledge the support and encouragement of Dr Simon Lenton, Co-chair of BACAPH and Scientific member of BPSU, who kindly reviewed the first script and gave constructive recommendations. The support of Oana Mitrofan with the thematic analysis of the paper is appreciated. Madeline Wang, BPSU Patient representative, provided encouragement and helpful advice to publish the findings of this research project.



Tables

Table 1: Respondents main areas of special interest

Main areas of special interest	N	%
Neurodevelopmental (including ADHD and ASD)	160	70.5%
,	111	FO 20/
Neurodisability	114	50.2%
Safeguarding/Child Protection	97	42.7%
Behavioural paediatrics	74	32.6
Look After Children	68	29.9%
Foetal Alcohol Syndrome	40	17.6%

Table 2: Local pathways for new presentations of child and adolescent mental health conditions.*

I I	Type of Service the child or adolescent would attend for assessment and or treatment			
Child or Adolescent's mental health condition	Paediatrics N (%)	CAMHS N (%)	A joint Paediatric and CAMHS Service N (%)	
ASD	211(93)	103(46.7)	47(20.7)	
ADHD	154(67.8)	138(60.8)	24(10.6)	
Tourette syndrome	142(62.6)	149(65.6)	3(1.3)	
Learning Disability	209(92.1)	84(37.0)	13(5.73)	
Attachment Disorder	84(37.0)	144(63.4)	9(4.0)	
Foetal Alcohol Syndrome	205(90.3)	32(14.1)	1(0.4)	
Eating/Feeding Disorders	127(56.0)	167(73.6)	18(7.9)	
Self-Harm/Suicidality	34(15.0)	223(98.2)	3(1.3)	
Anxiety including Obsessive	67(29.5)	223(98.2)	3(1.3)	
Compulsive Disorder(OCD)	07(23.3)	223(30.2)	3(1.3)	
Depression	29(12.8)	224(98.7)	3(1.3)	
Psychosis and Bipolar Disorder	4(1.8)	223(98.2)	3(1.3)	
*Multiple answers allowed	*			

^{*}Multiple answers allowed

Table 3. Respondents' involvement in the assessment or care of children with mental health conditions.

	Level of respondent's involvement*				
Child or Adolescent's mental health condition	Always/Mostly N (%) **	Sometimes N (%)	Rarely/Never N (%)		
ASD	168(76.4)	35(15.9)	12(5.5)		
Intellectual Disability	137(62.3)	67(30.5)	8(3.6)		
Foetal Alcohol Syndrome	122(55.5)	71(32.3)	20(9.1)		
ADHD	113(51.4)	52(23.6)	45(20.5)		
Tourette syndrome	69(31.4)	74(33.6)	59(26.8)		
Eating/Feeding Disorders	43(19.6)	81(36.8)	80(36.4)		
Anxiety including Obsessive Compulsive Disorder(OCD)	34(15.5)	87(39.6)	87(39.6)		
· · ·					
Attachment Disorder	33(15.0)	117(53.2)	54(24.6)		
Depression	6(2.7)	65(29.6)	130(59.1)		
Psychosis and Bipolar Disorder	5(2.3)	13(5.9)	166(75.5)		

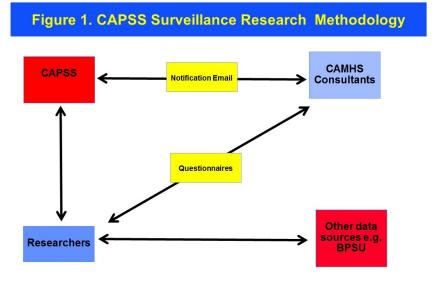
^{*}Involvement defined as "Awareness" of such as case from direct clinical care for the child or involvement in multidisciplinary team discussion or supervision about the child.

^{**} Arranged in order of prevalence for paediatricians' involvement

Box 1 showing some examples of comments explaining the involvement of community paediatricians in the assessment or care of children with mental health conditions.

- 1. "It is extremely difficult to access CAMHS and so many patients with mental/emotional health concerns end up being seen by paediatrics"
- 2. "Threshold for referral acceptance by CAMHS is very high so we tend to see a lot of children that would ideally be seen by CAMHS"
- 3. "The Community Paediatric team is holding responsibility for a large number of children who actually require psychological or psychiatric input which is not provided"
- It try cn.
 atrics eve.
 apport service.
 than nothing' wh.

 s." 4. "CAMHS have very strict entry criteria and reject a lot of patients meaning that they sometimes come to paediatrics even though we don't necessarily have the appropriate skills to assess them and no support services to work with them but if CAMHS won't accept then we are seen as 'better than nothing' which is adding additional strain to our already overstretched services."



338x190mm (96 x 96 DPI)

CAPSS Survey of Community Paediatricians				
We wish to know about Community Paediatricians involvement in the care of children and adolescents with specimental health conditions. This information will help us to understand the validity of the Child and Adolescent Psychiatry Surveillance System process.	ific			
*1. Does your work in community paediatrics involve clinical work with patients?				
○ Yes				
O No				
Any Comment				

CAPSS Survey of Community Paediatricians

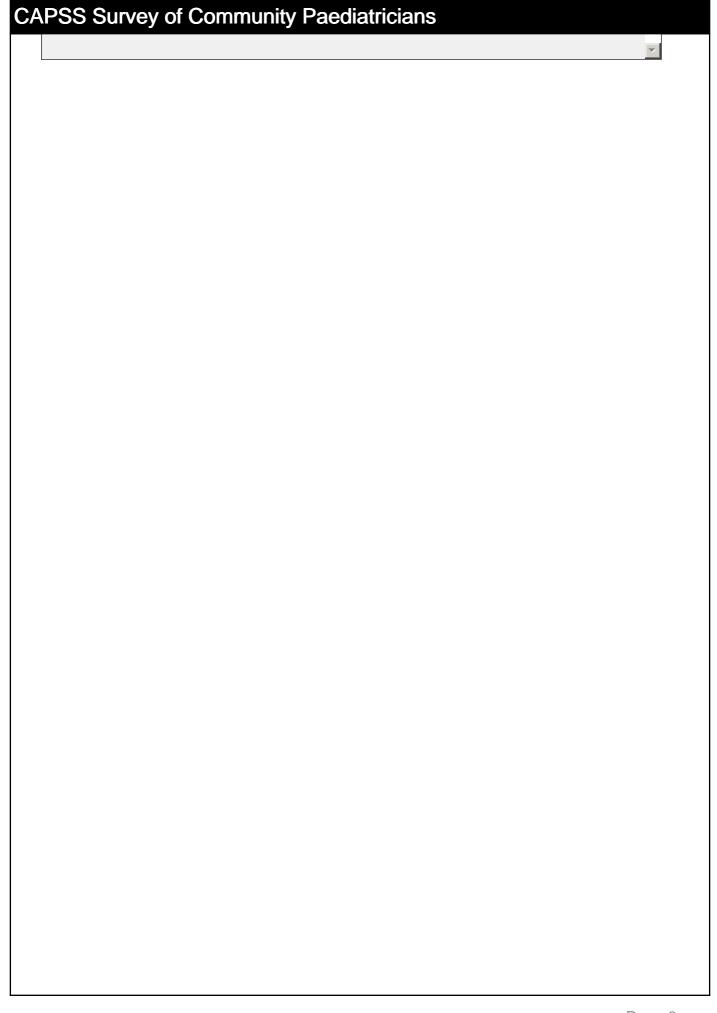
*2. Does your work involve both acute and community paediatric patients?

- Yes
- O No, all my work is in community paediatrics
- No, all my work is in acute paediatrics

CAF	PSS Survey of Community Paediatricians
3. V	Vhat is your grade?
0	Consultant
0	Associate Specialist
0	Staff Grade
0	Other Non-Consultant Career Grade
0	Trainee
4. 0	Oo you have a special role or special interest in one or more of the following?
Ple	ase answer all that apply
	Safeguarding/Child Protection
	Looked After Children
	Neurodevelopmental (including ADHD and ASD)
	Neurodisability
	Foetal Alcohol Syndrome
	Behavioural Paediatrics
	Other (please specify)
	v.

CAPSS Survey of Community Paedia	atricians
Please answer the questions that follow about all areas of	
*5. Is the assessment and/or treatment of and/or a part of the service you work in?	nental health disorders part of your job plan
C Yes	
© No	
Other	
Please specify	
f *6. What is the age range you are involved	with in your clinical work?
Please answer all that apply	
Less than 5	
5-11	
☐ 11-18	
Any Comment	

ollowing condit	tment if they p ions: n relation to th	resent in your o	catchment pop	oulation with on this may involve	
	My Service (WITH a Community Peadiatrician)	Another Service WITH a Community Paediatrician or Paediatrician	A Service WITH a Child and Adolescent Psychiatrist	Any Service with NO Input from Paediatricians and Child and Adolescent Psychiatrists	Don't know
lcohol and Drug Problems (Includes Intoxication)					
sychosis					
Mood Disorder Depression/Bipolar)					П
motional Disorder Anxiety/OCD)					
sychological Trauma					
Psychological Disorder ssociated with Physical symptoms					
eeding Disorders Avoidant/Restrictive Food ntake Disorders)		П			
ating Disorder					
self Harm and Suicidality					
earning Disability					
utism Spectrum Disorder					
,DHD					
ourettes					
Other leurodevelopmental Disorders					
aggressive and Disruptive Behaviour			П		
.buse/Neglect					
ttachment Disorder					
ooked After Children					
oetal Alcohol Syndrome					

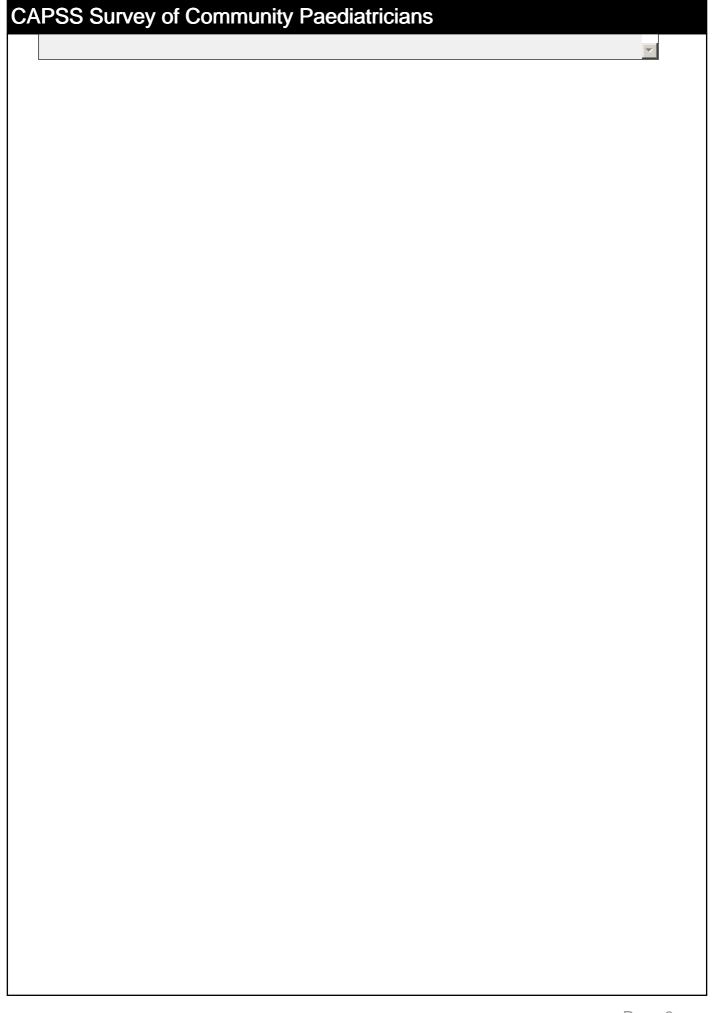


CAPSS Survey of Community Paediatricians

8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involement in their assessment or care.

*"Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent.

	Always/Mostly (>75%)	Often (50%-75%)	Sometimes (25%- 50%)	Rarely/Never (<25%)	Don't know
Alcohol and Drug Problems (Includes Intoxication)	0	O	O	O	0
Psychosis	С	0	O	0	\circ
Mood Disorder (Depression and Bipolar)	n O	O	O	O	0
Emotional Disorder (Anxiety/OCD)	O	O	O	O	O
Psychological Trauma	0	0	0	0	0
Psychological Disorder associated with Physical Symptoms	0	O	O	0	0
Feeding Disorders (Avoidant/Restrictive Food Intake Disorders)	0	O	0	O	0
Eating Disorder	0	0	0	0	0
Self Harm and Suicidality	0	0	0	0	0
Learning Disability	O	O	O	O	0
Autism Spectrum Disorder	C	0	O	O	0
ADHD	O	\circ	O	O	O
Tourettes	0	0	O	O	O
Other Neurodevelopmental Disorders	O	0	O	C	0
Aggressive and Disruptive Behaviour	O	O	O	O	0
Abuse/Neglect	O	0	0	O	0
Attachment Disorder	O	0	0	O	0
Looked After Children	O	0	0	O	0
Foetal Alcohol Syndrome	0	0	0	0	0
Any Comment					



CAPSS Survey of Community Paediatricians				
End of Survey				
Thank you very much for your time and help with this survey!				
9. Please indicate in the space below if there is anything else you feel is relevant that				
has not been covered in this survey				

CAPSS Survey of Community Paediatricians

End	of	Su	rv	ev
				~

Thank you for your time and willingness to participate in this survey but you can only help if you have a clinical role in community paediatrics.

CAPSS Survey of Community Paediatricians				
We wish to know about Community Paediatricians involvement in the care of children and adolescents with specific mental health conditions. This information will help us to understand the validity of the Child and Adolescent Psychiatry Surveillance System process.				
*1. Does your work in community paediatrics involve clinical work with patients?				
O Yes				
O No				
Any Comment				

CAPSS Survey of Community Paediatricians

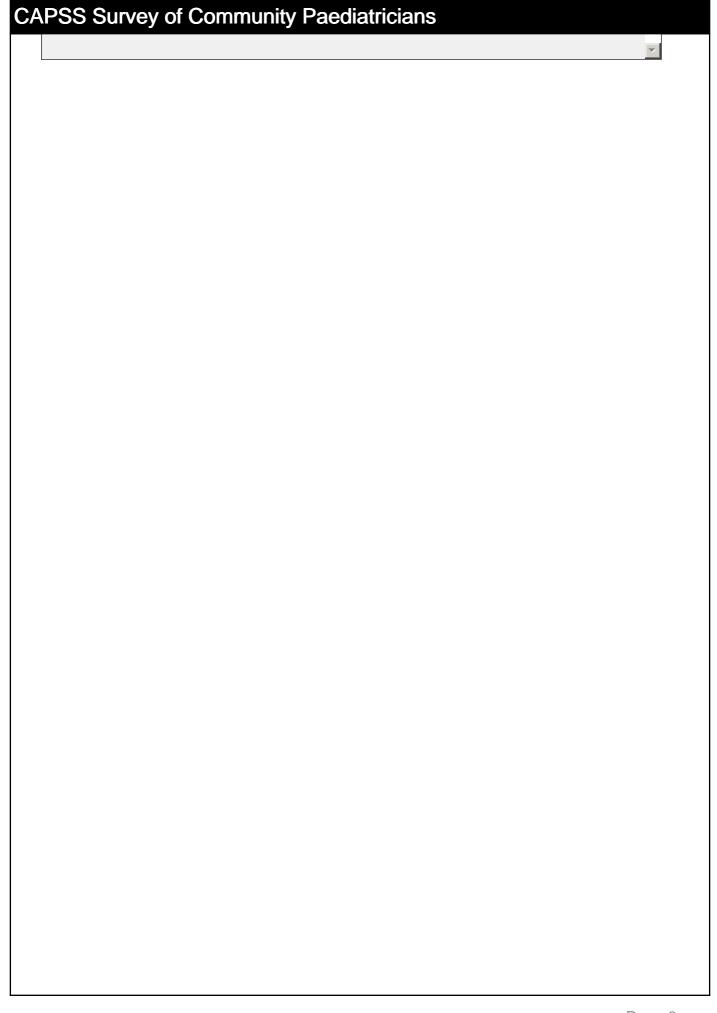
* 2.	Does your	work involve	both acute	and commun	ity paediatric	natients?
- 4.	DUCS YUUI	AACIV IIIACIAC	Doui acute	anu commu	itv ba c ulatlit	, valitiilə i

- O Yes
- No, all my work is in community paediatrics
- No, all my work is in acute paediatrics

CAF	PSS Survey of Community Paediatricians
3. V	Vhat is your grade?
0	Consultant
0	Associate Specialist
0	Staff Grade
0	Other Non-Consultant Career Grade
0	Trainee
4. 0	Oo you have a special role or special interest in one or more of the following?
Ple	ase answer all that apply
	Safeguarding/Child Protection
	Looked After Children
	Neurodevelopmental (including ADHD and ASD)
	Neurodisability
	Foetal Alcohol Syndrome
	Behavioural Paediatrics
	Other (please specify)
	v.

CAPSS Survey of Community Paedic	atricians
Please answer the questions that follow about all areas of	
*5. Is the assessment and/or treatment of and/or a part of the service you work in?	mental health disorders part of your job plan
C Yes	
O No	
C Other	
Please specify	
fst6. What is the age range you are involved	with in your clinical work?
Please answer all that apply	
Less than 5	
□ 5-11	
☐ 11-18	
Any Comment	

^k 7. Please indica ssessment/treat ollowing condition Please answer in nore than one bo	ment if they prons: n relation to the	resent in your o	catchment pop	oulation with on	
	My Service (WITH a Community Peadiatrician)	Another Service WITH a Community Paediatrician or Paediatrician	A Service WITH a Child and Adolescent Psychiatrist	Any Service with NO Input from Paediatricians and Child and Adolescent Psychiatrists	Don't know
vicohol and Drug Problems (Includes Intoxication)					П
Psychosis					
lood Disorder Depression/Bipolar)					
motional Disorder Anxiety/OCD)					
sychological Trauma					
sychological Disorder ssociated with Physical ymptoms					
eeding Disorders Avoidant/Restrictive Food stake Disorders)					
ating Disorder					
elf Harm and Suicidality					
earning Disability					
utism Spectrum Disorder					
DHD					
ourettes					
Other leurodevelopmental visorders					
ggressive and Disruptive ehaviour					
buse/Neglect					
ttachment Disorder					
ooked After Children					
oetal Alcohol Syndrome					
ny Comment					

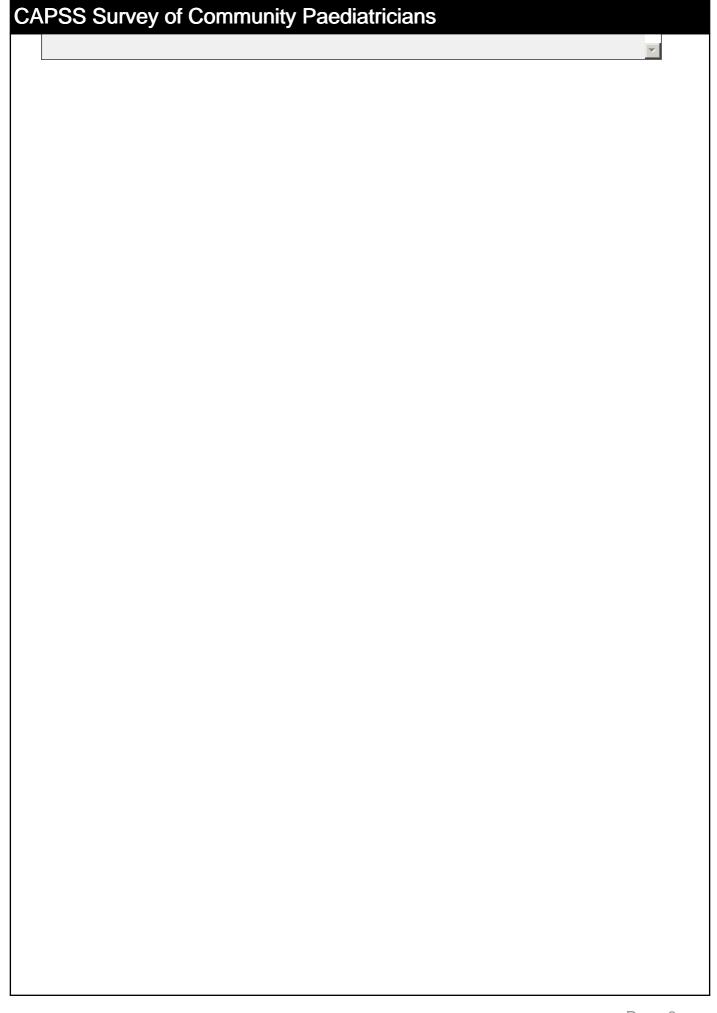


CAPSS Survey of Community Paediatricians

8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involement in their assessment or care.

*"Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent.

	Always/Mostly (>75%)	Often (50%-75%)	Sometimes (25%- 50%)	Rarely/Never (<25%)	Don't know
Alcohol and Drug Problems (Includes Intoxication)	O	O	O	O	0
Psychosis	O	O	O	0	\circ
Mood Disorder (Depressior and Bipolar)	n O	O	O	O	0
Emotional Disorder (Anxiety/OCD)	O	O	O	O	O
Psychological Trauma	0	0	0	0	0
Psychological Disorder associated with Physical Symptoms	O	0	O	0	0
Feeding Disorders (Avoidant/Restrictive Food Intake Disorders)	O	O	0	O	0
Eating Disorder	O	0	0	0	0
Self Harm and Suicidality	0	0	0	0	0
Learning Disability	0	0	O	0	0
Autism Spectrum Disorder	0	0	O	0	0
ADHD	O	O	O	\circ	O
Tourettes	0	0	O	0	0
Other Neurodevelopmental Disorders	O	0	O	C	O
Aggressive and Disruptive Behaviour	0	O	O	O	0
Abuse/Neglect	0	0	0	O	0
Attachment Disorder	0	0	O	0	0
Looked After Children	O	\odot	\circ	O	0
Foetal Alcohol Syndrome	0	0	O	0	0
Any Comment					



Thank you very much for your time and help with this survey! 9. Please indicate in the space below if there is anything else you feel is relevant that has not been covered in this survey Please indicate in the space below if there is anything else you feel is relevant that has not been covered in this survey	CAPSS Survey of Community Paediatricians
9. Please indicate in the space below if there is anything else you feel is relevant that has not been covered in this survey	End of Survey
has not been covered in this survey	Thank you very much for your time and help with this survey!

CAPSS Survey of Community Paediatricians

End of Survey

Thank you for your time and willingness to participate in this survey but you can only help if you have a clinical role in community paediatrics.

Appendix

Sι	ırvey	Qu	est	ions	>
1	Doo		sur	W/0	

1. Does your work in com	imunity paec	diatrics involve clinical work with patients?	
□ Yes		No	
Any Comment			

- 2. Does your work involve both acute and community paediatric patients?
- ☐ Yes No, all my work is in community paediatrics ☐ No, all my work is in acute paediatrics
- 3. What is your grade?

	Consultan	t□	Associate Sp	ecialist	Staff Grade	Other Non-Consultant Caree	r
(Grade		Trainee				

- 3. Do youhaveaspecialroleorspecialinterestinoneormoreofthefollowing? Please answer all that apply
 - Safeguarding/Child Protection
 - Looked After Children
 - Neurodevelopmental (including ADHD and ASD)
 - Neurodisability
 - Foetal Alcohol Syndrome
 - Behavioural Paediatrics
 - Other (please specify)
- 5. Is the assessment and/or treatment of mental health disorders part of your job plan and/or a part of the service you work in?

П	Yes	П	No	П	Others	(Please	specify
_	103	ш	140	ш	Others	(i icasc	Specify

- 6. What is the age range you are involved with in your clinical work? Please answer all that apply
 - Less than 5
 - 5-11
 - 11-18
 - Any Comment?
- 7. Please indicate which service(s) a child/adolescent will attend for assessment/treatment if they present in your catchment population with one of the following conditions:

(Please answer in relation to the age range of your service, this may involve checking more than one box for each condition)

	My Service	Another	A Service	Another	Don't
	(WITH a	Service WITH a	WITH Child	Service WITH	know
	Community	Community	and	input from	
	Peadiatrician)	Peadiatrician	Adolescent	Peadiatricians	
		or	Psychiatrist	and	
		Peadiatrician		Adolescent	
				Psychiatrist	
Alcohol and Drug					
Problems (Includes					
Intoxication)					
Psychosis					
Mood Disorder					

(Depression/Bipolar)			
Emotional Disorder			
(Anxiety/OCD)			
Psychological			
Trauma			
Psychological			
Disorder associated			
with Physical			
Symptoms			
Feeding Disorders			
(Avoidant/Restrictive			
Food Intake			
Disorders)			
Eating Disorder			
Self Harm and	V		
Suicidality			
Learning	/X .		
Disability			
Autism Spectrum			
Disorder			
ADHD			
Tourettes	•		
Other			
Neurodevelopmental Disorders			
Aggressive and			
Disruptive Behaviour			
Abuse/Neglect			
Attachment Disorder			
Looked After			
Children			
Foetal Alcohol		7	
Syndrome			
Any Comment			

- 8. If a child/adolescent with one of the following conditions attends the community paediatric service you work in, please indicate the likelihood of your involvement* in their assessment or care.
- *"Involvement in their assessment or care" includes being aware of (e.g. having responsibility for, aware through multidisciplinary team discussion, supervision) or having direct clinical contact with the child/adolescent).

			Always/Mostly	Often	Sometimes	Rarely/Never	Don't	
			(>75%)	(50%-75%)	(25%-50%-	(<25%)	know	
Alcohol	and	Drug						

Problems (Includes Intoxication)			
Psychosis			
Mood Disorder (Depression/Bipolar)			
Emotional Disorder			
(Anxiety/OCD)			
Psychological Trauma			
Psychological Disorder			
associated with Physical			
Symptoms			
Feeding Disorders			
(Avoidant/Restrictive			
Food Intake Disorders)			
Eating Disorder			
Self-Harm and			
Suicidality			
Learning Disability			
Autism Spectrum			
Disorder			
ADHD			
Tourettes			
Other			
Neurodevelopmental			
Disorders			
Aggressive and			
Disruptive Behaviour			
Abuse/Neglect			
Attachment Disorder			
Looked After Children		5 .	
Foetal Alcohol			
Syndrome			
Any Comment			

9. Please indicate in the space below if there is anything else you feel is relevant that has not been covered in this survey

Thank you very much for your time and help with this survey!

End of Survey